

FOOD EDUCATION FOR FOOD SECURITY

Emily Doyle-Yamaguchi | Resources for Rethinking

“Give a man a fish, he eats for a day. Teach a man to fish and he eats for life”

Today, there is mounting evidence to show that we are facing a physical inactivity and obesity crisis in Canada. For a variety of reasons (changing lifestyles, more sedentary pastimes, lack of skills or habits), children and youth are more inactive than ever before. Regardless of the reason, it is imperative that these disturbing trends are reversed. The Canadian Association for Health, Physical Education, Recreation and Dance (CAHPERD) believes that Quality Daily Physical Education (QDPE) in every school and for every child is an essential intervention to the inactivity epidemic that is currently plaguing the health of this country’s children.

This age-old proverb speaks to the importance of education for life-long success, but how often do we interpret these words literally? While fishing is no longer an essential survival skill, food education is becoming increasingly important to a world whose ecological future is at stake.

What if by Grade 3, every student in Canada knew not only how to apply numerical patterns to daily life, but also how to grow a carrot? Or if when you asked the average Grade 5 student where a banana comes from, the answer would not be “the grocery store”. What I am referring to is a reality where food education, that is, knowing how to grow and consume food sustainably, both for your health and the health of the planet – is considered as essential to curriculum as math or languages.

Why Food Education?

Rising food costs, childhood obesity, diabetes, soil erosion, increasing incidents of water and food contamination (Walkerton and the recent E-coli contaminated spinach scare are two of many examples): these are indicators that something is not quite right. Many of the ways in which food is being produced, distributed and consumed are creating major global problems, contributing to an issue referred to as “food security”.

What is Food Security?

A food “secure” situation is one in which all people at all times have access to safe, nutritious, culturally-appropriate food, produced in a sustainable manner and obtained through non-emergency food channels.¹ An eating pattern that involves excessive consumption

of highly processed, heavily packaged food is not food secure. Neither is a family that gets most of its food from a food bank, or an individual who lives in a neighborhood where the closest source of fresh fruits and vegetables is not within walking distance.



Food security can be measured most effectively by considering affordability, accessibility, availability, appropriateness (culturally, morally and nutritionally), safety and sustainability. While food security is often associated with poverty, one does not have to be “poor” to be food insecure. In a conversation with Dr. Brent Skura, Associate Professor in the Faculty of Land and Food Systems at the University of British Columbia, Dr. Skura pointed out that everyone can be affected. Two children from very different socioeconomic backgrounds could have equally serious nutrition problems. Where one may have too much food that is unhealthy, the other could have not enough food of good quality.

Healthy Eating for Healthy Learning and Living

Improving food security does not necessarily mean increasing access to highly processed foods that are dense in calories and low in essential nutrients. As a professor and researcher of food, nutrition and health, Dr. Skura emphasizes the impact that diet can have on learning and long-term health. Whether it is an imbalance of nutrients or lack of food, nutrition affects alertness and energy available for work and play at school. But students’ decisions to choose foods that will sustain their bodies will not be made unless the appropriate lessons are taught, points out Dr. Skura.

¹ This definition has been adapted from Kalina, L. (2001). *Food Security*. Building food security in Canada. L. Kalina, Kamloops, BC.

Schools As Part of the Solution

Children spend half of their day at school and most eat at least one meal during that time. This provides an important opportunity for students to learn more about food, including debunking myths around the expense of healthy eating, promoting positive eating and food safety habits, and making connections between the food they eat and the land it comes from. Furthermore experiential learning is an important part of reinforcing lessons taught, says Dr. Skura. One good example of a program for integrating experiential learning is Ecoleague, a project of Learning for a Sustainable Future.

On June 18, 2008, thirty-one Grade 7 students from Cardinal Leger Catholic School in Toronto piloted one of Ecoleague's eight "recipes" for action projects, called "Food for Thought". Prior to the action project, teachers are provided with a variety of lesson ideas to prepare the students for the big day. These include tracking the life of a tomato and keeping a food journal, among others. The day of the action project students participate in different activities, such as discovering how to grow their very own vegetables in the classroom and learning about seasonality of produce as they choose ingredients for making a pizza "from scratch". "It was interesting to see the students realize how prices of food change depending on the seasons, or whether it was imported or local", says Lidija Puteris, Youth Program Manager for Learning for a Sustainable Future. Not only did the students learn more about where their food comes from, but they also had fun. "I liked the opportunity we had to plant and take home our own produce". For more information about Ecoleague visit www.ecoleague.ca.

Two other projects are making a difference by helping teachers to integrate food education into classrooms.

Here they share some of their stories:

The Intergenerational Landed Learning Project at UBC Farm

"I'm hungry. Can I go get a snack?" When Stacy Friedman, Coordinator of the Intergenerational Landed Learning Project at UBC Farm, was asked this question by one of the students participating in the program, she did not expect to see him return with a piece of kale hanging out of his mouth.

This moment is one of the many authentic learning experiences that the Intergenerational Landed Learning project provides. "It's about real consequences to your actions", says Friedman, "if you don't care for the garden, the plants will not do as well". The 80-90 children that participate in this project each year are partnered with volunteer farmers and master gardeners, their "Farm Friends", to plan, grow and manage a vegetable garden. Many of the participants had never seen food grow before they started coming to the UBC Farm, says Friedman, but "within

a few visits kids are tearing leaves off of [vegetable] plants and popping them into their mouths".

"Participating students learn to set up experiments and to answer their own questions", tells Friedman. Such inquiry-based, or discovery learning can be a challenge to implement, however when asked how teachers felt about this experience, they replied, "I could never go back to teaching any other way....Even if I couldn't bring my class back to the garden; this has already transformed the way that I teach". Furthermore there are ways to overcome some of these challenges, says Friedman. "Take advantage of community resources, invite people to speak in your class...to lessen burden and weight of transforming how you educate", she says.

The results are well worth the effort. After participating in the program, one school in the Collingwood neighborhood of Vancouver continued with the lessons learned by building its own garden, painting a mural about growing food and getting the whole school involved. Word has also gotten around amongst the students. "Now there are kids wanting to get into that teacher's class, even if they don't know about UBC Farm, just because they hear it's cool", says Friedman.

FoodShare's "The Great Big Crunch"

A project in Toronto is also helping to bring food into the classroom. This past March, over 130 schools across Canada, including every single school in Prince Edward Island, participated in FoodShare Toronto's event "The Great Big Crunch". "Each school took the time to learn a bit more about apples – their perfection as a nutritious snack, how they grow, their history and so much more", says Meredith Hayes, Coordinator of the Field to Table Schools program at FoodShare Toronto. In order to support teachers as they integrate the Great Big Crunch into their classrooms, FoodShare provides activities and lesson plans for reinforcing the learning that surrounds this noisy, crunchy affair. When asked "Why the Great Big Crunch", Hayes replied that this activity is "simple [and] reminds us that apples are portable, affordable, quick and healthy snacks". This is an accessible program and provides teachers with activities and support to teach about the food system.

In addition to the centerpiece event that took place in Toronto and involved 80 Grade 3 students who learned how apples are grown, grafted, pollinated, transported, prepared, consumed and composted, other participating schools discovered a number of ways to integrate this event into their classrooms. According to Hayes, one Nova Scotia school sold apple kebobs for a week after and donated the money to a local conservation area. A Grade 12 Food and Nutrition class in Scarborough also carried out a project that examined apple orchards and local farmers.

We need less “chalk and talk” and more action, says Dr. Skura, to create life-long learning about food, health and the connection between land and food. Ecoleague, the Intergenerational Landed Learning Project at UBC and FoodShare are all helping teachers to make this possible.

How Else Can Teachers Integrate Food Education Into the Classroom?

- **Access online resources.** Resources for Rethinking is a free online database of teacher-reviewed, curriculum-matched resources that provide lesson plans and activities for integrating food and other sustainability issues into classrooms across Canada. Visit www.resources4rethinking.ca for more information.
- **Request to invite speakers** (e.g. nutritionists, agrologists, medical professionals, etc.) during professional development days to talk about food issues and health.
- **Take on a bit at a time.** Start with something small and build. Start with the basics and use simple examples where students can do hands-on work, like growing carrots, or how to pack a healthy lunch for a field trip. Dr. Skura points out that, at least indoors, carrots can be integrated into every school’s year: plant them by the end of April and you would have something to eat by the end of June. Lettuce, spinach and sprouts are other good growing options.
- **Contact local food projects and organizations**, such as FoodShare and the UBC Farm, for ideas and support. To contact FoodShare, visit www.foodshare.net. To contact UBC Farm, visit www.landfood.ubc.ca/ubcfarm.

About the Author

Emily Doyle-Yamaguchi is co-manager of Resources for Rethinking, a project of Learning for a Sustainable Future. Learning for a Sustainable Future is a national non-profit organization whose aim is to integrate sustainable development into k-12 curriculum. For more information please visit www.lsf-1st.ca.