Learning, Food, and Sustainability

Jennifer Sumner
Editor

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Sites for Resistance and Change

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Editor

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Dedication of book to Cathleen Kneen

This book is dedicated to Cathleen Kneen, a contributor to this work. She was an educator, activist and friend whose spirit continues to guide us in our work on food system transformation.

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INTRODUCTION

Jennifer Sumner

Learning and food are central to human existence. Learning helps us to survive and evolve as a species, while food provides us with the glue that holds our survival and evolution together. In tandem, they form a dynamic combination that has fueled change for millennia.

In spite of their centrality to human existence, learning and food have seldom been addressed at the same time. Those who study learning have not often turned their gaze toward food, while those who study food have generally overlooked the learning associated with it. And yet, food is not only an object *of* learning but also a vehicle *for* learning (Flowers and Swan 2012). In essence, food is inherently pedagogical, and eating is a pedagogical act (Sumner 2008a) as is producing, processing, distributing, purchasing, and disposing of food. What we learn, and do not learn, by engaging in these human endeavors has deep and enduring implications for the sustainability of our food systems and our world.

This book explores the complex intersection of learning and food in the home and community, in the classroom, in social movements, and into the future, all within the context of contributing to more sustainable food systems.

LEARNING

Learning is the process of gaining new knowledge, of synthesizing acquired knowledge, and of rejecting knowledge that is no longer fit for purpose. It is much broader than education and refers to any elements that combine to produce a change in mental constructs or behaviors (Spencer

and Lange 2014). As such, learning is also a lifelong process, from babies learning to use eating utensils and adolescents learning to cook for themselves, to adults learning to feed a family, and seniors learning to link nutrition and healthy aging.

While learning is lifelong, not all learning is positive. Spencer and Lange (2014) raise this issue when they discuss people learning how to use cocaine or how to con pensioners out of their savings. In the same vein, people can also learn to see frozen microwaveable dinners as the food of the future, to consider fast food as comfort food, or to equate the consumption of junk food with freedom. All of these examples highlight the fact that “learning defies easy definition and simple theorizing” (Merriam and Caffarella 1999, 248).

Learning is generally divided into three main categories: formal, non-formal, and informal learning (Hrimech 2005), all of which have close associations with food. Formal learning takes place in classrooms at all levels—from nursery school to graduate school. While often didactic, it can also be collaborative, with teachers and students learning together and from each other. Primary students learning about basic nutrition, secondary students learning about food and water issues, culinary students learning how to incorporate local food into their menus, and university students studying the political economy of food are all examples of formal learning.

Non-formal learning occurs in planned situations outside the classroom such as retreats, seminars, and workshops. This kind of learning is actively chosen by participants who are seeking expertise in a desired area, such as composting, pickling, or permaculture. One form of collective non-formal learning that evolved from the Danish folk schools is kitchen-table meetings. For example, the Ecological Farmers of Ontario hold kitchen-table meetings at designated farms during the winter months as a forum to teach each other about specific aspects of organic farming (Sumner 2008b).

Informal learning takes place through everyday encounters and self-teaching. Though the most common form of learning, it is also the least recognized. In spite of this lack of recognition, people learn all the time as they go about their daily lives—working, shopping, playing, traveling, watching television, surfing the internet, meeting friends, and dining with family. Reading the ingredients on a food label, talking to your neighbor about allotment gardens or setting aside a day to teach yourself how to make bread are all examples of informal learning.

Crosscutting these traditional divisions are particular types of learning, such as experiential learning, embodied learning, and transformative learning. Experiential learning links life experiences and learning, keeping in mind that “experience can be very problematic” and people may have to unlearn experiences of racism or abuse (Spencer and Lange 2014, 9). Boud (2005) maintains that experiential learning is commonly used in two different senses: it describes the prior learning that is brought to a new experience, and it refers to learning processes in which the learner’s experience provides the prime source and stimulus for learning. School gardens, cooking classes, and worm composting all offer opportunities for experiential learning.

Embodied learning reminds us that we not only learn with the mind but also the body. “Embodied learning is a way of recognizing that we know with our bodies as well as our minds, to reclaim our wholeness as learners” (Clark 2005, 210). The story of French author Marcel Proust biting into a madeleine and feeling an explosion of memories is a prime example of embodied learning.

Transformative learning occurs in the face of a disorienting dilemma and results in a fundamental shift in worldviews. Unlike other forms of learning, it involves a “deep, structural shift in basic premises of thought, feelings and actions” (TLC 2015). Watching a film like *Food Inc.*, eating food you have grown yourself or going to a slaughterhouse can result in transformative learning.

In essence, learning occurs every day, in many ways, and one of the greatest catalysts for all sorts of learning is food.

FOOD

Food has always been associated with learning, from our earliest ancestors learning how to grow food instead of hunting and gathering it, to modern shoppers learning how to navigate competing messages in the supermarket: Local or global? Conventional or organic? Fair trade or free trade? The answers to these questions, and many more, highlight the overwhelming complexity of food. In the words of Welsh and MacRae (1998, 242):

Food is a nexus for industry, rural/urban relations, global trade relations, domestic and social life, biological health, social belonging, celebration of community, paid and unpaid work, expressions of care, abuse of power, hunger strikes, fasts and prayer. Food is part of daily life at least as much as we are consumers and possibly more as we labour for either love or money.

Clearly, food is much more than simply fuel for the body—it carries deep social, cultural, economic, and environmental implications that people experience every day. And because food has long been associated with wealth and power (Friedmann 1993), it also intersects with questions of gender, race, class, ethnicity, and imperialism. For all these reasons, food engenders learning, whether we learn to adapt to eating nutritionally compromised industrial food (see Winson 2013) or whether we learn to demand food that is healthy, green, fair, accessible, and affordable.

The growing interest in food has created a whole new vocabulary to learn, such as food miles, food deserts, food systems, food justice, and food pedagogies. Food miles represent the distance that food has traveled from field to fork. The concept emphasizes the relationship between the calories available in the food and the energy expended to transport it to the place where it will be consumed, as well as the oil and carbon emissions associated with this transportation. In a global economy, food travels enormous distances. For example, Xuereb (2005) estimates that food items sold in southern Ontario, Canada, have traveled, on average, about 4500 kilometers from the place they were grown or raised. Learning to eat “closer to home” helps to reduce food miles and supports the local economy.

The evocative concept of food deserts was developed by food policy researchers in the UK to characterize human settlements lacking access to a variety of healthy and affordable foodstuffs (Winson 2004). Highlighting the fact that access to food is not only limited by income but also by such factors as geography and distribution, food deserts are areas with insufficient numbers of stores and other food-related facilities that provide access to fresh and healthy foods (Koç et al. 2012). They are often found in low-income and/or minority urban communities but can also be found in rural communities, schools, universities, bus stations, airports, and along major highways. Communities in food deserts can learn to create food oases by opening a food co-op, participating in a food-box program or lobbying policy makers to address food desert issues.

Food systems are interdependent webs of activities that include the production, processing, distribution, retailing, consumption, and disposal of food (Sumner 2012). Like all systems, food systems are interconnected in such a way that they produce their own pattern of behavior over time (Meadows 2008). This behavior affects both humans and the environment in positive or negative ways, depending on how the system is organized and who benefits from this organization. For example, the current global food system is organized to benefit large multinational food corporations,

not the one billion people who go hungry every day. A sustainable food system would be organized to benefit the majority of people in the world by ensuring everyone was fed within the ecological limits of the planet (Sumner 2012).

Food justice is associated with a growing social movement of food activists who emphasize production that is not only environmentally sustainable but also socially just, taking into account workers in all sectors of the food system (Koç et al. 2012). These activists bring an anti-oppression analysis to the question of food system transformation, linking anti-racism, feminism, and Indigenous rights movements to the food movement. Learning to participate in boycotts and buycotts—that is, deliberately choosing not to purchase or actively choosing to purchase a product—is one of many ways to work toward food justice.

The concept of food pedagogies brings the realms of food and learning together in a novel combination that evokes engagement and transformation. Food pedagogies have been described as:

Congeries of education, teaching and learning about how to grow, shop for, prepare, cook, display, taste, eat and dispose of food by a range of agencies, actors and media; and aimed at a spectrum of “learners” including middle class women, migrants, children, parents, shoppers, and racially minoritised and working class mothers. (Flowers and Swan 2012, 425)

For these authors, food pedagogies encompass either intended or emergent change—whether in behavior, habit, emotion, cognition, and/or knowledge—at a range of levels, from the individual, through the family to the group and collective level. Following the tenets of critical pedagogy (e.g., Finger 2005), critical food pedagogies entail a range of approaches that are not just concerned with any type of change but with change that addresses power and injustice (Sumner 2015). Brazil’s new dietary guidelines are an inspiring example of critical food pedagogy because they encourage people to avoid fast-food restaurants and processed food and warn about the propaganda inherent in food advertising.

All in all, as Roberts (2013) contends, food is a hot topic—for two reasons. First, many people have come to realize that food cannot be taken for granted any longer. And second, many people have also become excited about food projects that “help them find their voice and satisfy their desires for a meaningful, engaged, empowered and authentic life” (11). Such a life will only be fully realized within a framework of sustainability.

SUSTAINABILITY

Sustainability is a word that is commonly used but seldom understood. It came to prominence with the publication in 1987 of the Brundtland Report—*Our Common Future*—which promoted the concept of sustainable development. A vague and contested term sustainability has been associated with a bewildering range of ideas, from the Dow Jones Sustainability Index to Deep Ecology (Sumner 2007). But its appropriation by self-serving interests should not disqualify it from use. Originally associated with environmental problems, it has expanded to cover social and economic issues as well, making it ripe with learning opportunities and ideal for analyzing food.

In its most undeveloped form, sustainability entails the ability to meet present needs without compromising the ability of future generations to meet their own needs (Koç et al. 2012). While this adaptation from the Brundtland Report has gained familiarity, it does not define the term “needs” and is premised on ever-expanding economic growth, which global warming is currently teaching us to question. A recent definition involves a more focused approach, linking it with the concept of the civil commons—co-operative human constructions that protect and/or enable universal access to life goods such as water, shelter, education, health-care, and, of course, food (Sumner 2007). Linking sustainability to the provision of life goods addresses the problem of needs and does not depend on economic growth—it could thrive in a steady-state economy. In short, building the civil commons by providing more life goods makes us more sustainable; enclosing the civil commons by providing fewer life goods makes us less sustainable. Nowhere is this clearer than in the realm of food. And given that sustainability doesn’t come naturally—but has to be learned (Sumner 2007)—linking learning, food, and sustainability brings together three vital aspects of our future as a species.

PUTTING IT ALL TOGETHER: LEARNING, FOOD,
AND SUSTAINABILITY

Interest in food has burgeoned over the last 20 years for a number of reasons, beginning with the consolidation of the global corporate food system. This consolidation has resulted in growing corporate control over what we eat, the pervasive commodification of food, and the spread of the

so-called Western diet—highly processed foods laden with salt, sugar, and fat. Under this system,

Food is no longer viewed first and foremost as a sustainer of life. Rather, to those who seek to command our food supply, it has become instead a major source of corporate cash flow, economic leverage, a form of currency, a tool of international politics, an instrument of power – a weapon! (Krebs 1992 in Millstone and Lang 2003, 11)

In reaction to the increasing corporate control of this vital life good, a number of social movements have coalesced around the subject of food. For example, the local food movement questions the distance that food now travels and champions food close to home. The food justice movement condemns the injustices associated with the global corporate food system. And the food sovereignty movement demands that peoples and nations should be able to choose their own foodways, instead of being forced (through supra-national mechanisms such as trade agreements) into the global corporate food system.

Hot on the heels of these food movements have come popular books and articles dedicated to food, led by authors like Michael Pollan, Marion Nestle, Eric Schlosser, and Raj Patel. These publications have been followed by scholarly interest in this rising phenomenon. A number of academic disciplines have already recognized the importance of food—including sociology, geography, planning, and history—spawning a host of textbooks, conferences, special journal issues, and courses on the subject.

In short, food is one of the fastest growing areas of study in many fields, but education is just beginning to grapple with what Belasco (2007, 5) described as this “edible dynamic” (e.g., Sumner 2008a, 2013a, b; Flowers and Swan 2012; Swan and Flowers 2015; Walter 2013). Such engagement is crucial, given the mounting evidence that our global corporate food system has become massively unsustainable. Goodman et al. (2014, 4) describe the glaring and multifaceted contradictions of this system and “the exploitative trading relations embedded in the global supply chains that support its growth and (expanded) reproduction.” They go on to describe the food insecurity and malnutrition of over one billion people, the interrelated ecological and livelihood crises, the growing global resource constraints on our intensive, fossil-fuel-dependent agriculture, and the disease crises associated with Western lifestyles and diets focused on animal fats and highly processed industrial food, more

accurately referred to as “edible food-like substances” by Michael Pollan (2008, 1). Faced with a suite of environmental, social, cultural, and economic problems associated with the global corporate food system, it is time to ask: What is the role of education? Does it merely promote adaptation to this unsustainable system or can it encourage the kind of learning experiences that will contribute to much-needed change?

This edited volume will be the first to address these questions by exploring the intersection of learning and food at the interface with sustainability. Taking a broad pedagogical approach to the question of food, it will focus on learning, resistance, and change in a number of key sites—homes, communities, schools, and social movements—while also looking to the future. The ultimate aim of the book involves *learning our way out* of our current unsustainable food system and *learning our way in* to more sustainable alternatives.

All the chapters in this book link learning, food, and sustainability in creative and instructive ways. Within the home and community, Chapter 1 focuses on one of the most intimate links between food and learning—breastfeeding. Susan Machum explains how breastfeeding involves a steep learning curve for mothers and newborns, including the move from abstract knowledge to praxis. After briefly reviewing breastfeeding practices over the last century, she explores the options available to families, particularly within the larger context of the tensions between initiatives that support breastfeeding and the concurrent backlash against it. She concludes that providing mothers with emotional and financial security are some of the parameters of a sustainable food system.

Learning to prevent food waste at home is the topic of Chapter 2. With the global issue of food waste as a backdrop, Tammara Soma looks at women’s unpaid foodwork in Indonesia and how children are taught to eat all their food through folktales and the Islamic concept of “mubazir,” meaning acts of wasting and being excessive, which are considered sinful. These pedagogical tools help to reduce or prevent food waste and contribute to a more sustainable food system.

Chapter 3 visits community health-care settings with Donna Appavoo, where the educational tools used by professionals ignore the interdependence of food systems and health systems, and focus narrowly on biological markers and daily energy requirements. An emerging narrative is challenging this focus on the nutrient constituency of foods by prioritizing community food security—described by Hamm and Bellows (2003, 37) as a “a situation in which all community residents obtain a safe, culturally

acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice.” By broadening the focus to include “local sustainable food” and “sense of community,” this alternative narrative uncovers and supports the many facets of the interconnections between food systems and health systems, and facilitates addressing complex inter-systemic issues such as diabetes.

Schools provide another site where learning, food, and sustainability connect and inspire. In Chapter 4, Pamela Koch looks at the school curriculum, arguing that food-based education needs to both consider larger food system issues and fit into the practices of the current education system. Ultimately, food-based education would encourage students to know which foods are healthy, ecologically sustainable, and socially just. In this way, students would be equipped with the critical knowledge and analytical skills to make challenging decisions about food in the future.

Learning gardens are the topic of Chapter 5, in particular the process of developing a children’s learning garden at a Land Grant University in the USA. While seemingly a reasonable and straightforward idea, implementing it became a learning project in itself as Christopher Murakami and fellow university students in the preschool and teacher training program had to negotiate the politics, policies, and culture of a large institution. The result was a compromise that straitened their original goals but nevertheless created a bridgehead that helps children develop a healthy relationship with the food, nature, and community.

Chapter 6 continues the focus on schools with an investigation into the development of food education in the Finnish comprehensive school setting. Finland has a long history of engagement with healthy food. For example, the provision of tax-paid, nutritious, hot school meals has been part of health promotion in Finnish schools for over 60 years. Kristiina Janhonen, Johanna Mäkelä, and Päivi Palojoiki make a case for taking students’ agency and participation as premises for educating about food and eating. As well as promoting personal well-being and health, food education is seen as a medium for understanding the complexities of the world and for supporting sustainable lifestyles embedded in everyday practices.

The next section hones in on social movements as sites of resistance and change. Chapter 7 examines alternative food movements and the role of narratives in community food work. Beginning with the idea of education as cultural work, Kim L. Niewolny and Phil D’Adamo-Damery illustrate the educative role that narratives can play in engendering

political praxis and new possibilities. In particular, they look at the Appalachian Foodshed Project to show how narratives and storytelling can open up ways to humanize the “wicked problem” of food insecurity while creating new possibilities in the everyday work of resistance and learning.

Chapter 8 proposes campus-community engagement as a means to strengthen the food sovereignty movement. La Via Campesina, a world-wide peasant organization that is the largest social movement in the world (Friedmann 2012), coined the term food sovereignty, which entails the right of peoples and governments to determine their own agriculture systems, food markets, environments, and modes of production. Using community-service learning, Peter Andrée, Lauren Kepkiewicz, Charles Levkoe, Abra Brynne, and Cathleen Kneen consider how movements for food sovereignty and community-campus engagement can work together to provide academics with important training for critically engaging with food systems, to encourage knowledge sharing between social movement actors and academics, and to support social movement organizations working toward more just and sustainable food systems.

Chapter 9 rounds out the social movement section by considering the food justice movement through a certificate course offered by the Coady Institute at St. Francis Xavier University in Antigonish, Nova Scotia. Deborah Barndt reflects critically on the challenges associated with two shifts: one from dominant notions of food security to a consciousness based on food justice and food sovereignty and the other from dominant educational models to popular education methods that valorize Indigenous knowledges and holistic ways of knowing.

The final section of the book looks toward the future. Chapter 10 investigates food literacy, in particular among young people. Although food education programs have grown in popularity in recent years, their outcomes are unclear. Are they contributing to a food-literate population and, if so, what kind of food literacy is being achieved and what are the prospects for food system change? Sarah Goldstein studied food education at The Stop Community Food Centre in Toronto and discovered that by focusing on individual behavior modification, the program primarily facilitates the dominant food literacy paradigm based on neoliberal consciousness. For this reason, it does not necessarily lead to wider food system change, thus raising the question of what is the best form of food education

for the future if we want a more critical and engaged food literacy and a more sustainable food system.

School food and nutrition policies as tools for learning and change are the subject of Chapter 11. Mary McKenna and Sharon Bodovsky propose that teaching about such policies in schools moves them from the hidden curriculum—part of the unspoken academic, social, and cultural messages communicated to students—and makes them explicit. This move changes students from being passive recipients of policy to active participants in all aspects of the process. As a result, students gain greater understanding of school food environments, become engaged in a personally relevant topic, and enhance their development as future citizens.

Chapter 12 of the book involves learning to transgress—that is, learning to ask how we can learn our way out of our current unsustainable food system and learn our way into more sustainable alternatives. Angie Carter, Claudia M. Prado-Meza, and Jessica Soulis were students in a sustainable agriculture program at a public, land-grant university in the USA. They used their experiences as both students and agents of social change to better understand the unlearning and relearning process and the creation of community as a transformative space. They also inquired how their experiences can inspire others as they collectively unlearned their way into more sustainable food systems.

The Afterword by Wayne Roberts sums up the importance of learning and food. After highlighting the invisibility of food in educational systems and society at large, he vividly describes a number of potential and actual transformative exceptions where food is not only visible but also front and center. Using illustrations from his own broad food experience, he outlines how schools and communities provide permeable sites where people can learn resistance and change and realize that a more sustainable food system is possible.

Together, these chapters offer an opening to a world made more sustainable by the conscious recognition of the connections between learning and food. In their study of alternative food networks, Goodman et al. (2014) observed that food is a realm of knowledge. “Growing and eating are both practices imbued with ways of knowing the world, and with knowing the ways to construct the kind of world we want to inhabit” (44). The kind of world most people want to inhabit is more sustainable than our current one. The chapters in this book show how learning about food and broader food issues can make us more sustainable and inspire us to begin constructing that world.

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