# FOOD LITERACY AND ADULT EDUCATION: LEARNING TO READ THE WORLD BY EATING

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#### **Abstract**

While literacy is central to the field of adult education, food literacy is just emerging as a crucial concept. Backed by the recognition that we all eat, food literacy is gaining traction in an era of rising crises associated with food, from increasing world hunger to the so-called obesity epidemic. But current understandings of food literacy are inadequate for dealing with the crises we must learn our way out of; most definitions are apolitical, blame the victim, and do not consider the larger context, thus constraining the "politics of the possible." And yet, as a knowledge-based concept, food literacy has the potential to play a powerful role in adult learning and social change. By calling on Habermas' (1978) three knowledge domains and keeping in mind Freire's (1976) insight that all education is political, a new understanding of food literacy emerges that is capable of analyzing current foodscapes and modelling sustainable alternatives.

#### Résumé

Sachant que le langage se situe au cœur du domaine de l'éducation des adultes, l'éducation à l'alimentation émerge en tant que concept significatif. Appuyée de la notion que nous mangeons tous, l'éducation à l'alimentation prend de l'ampleur dans la foulée croissante de crises liées à l'alimentation, que ce soit la famine au niveau mondial ou la soit-disante pandémie qu'est l'obésité. Les connaissances actuelles en matière de l'éducation à l'alimentation ne réussissent toutefois pas à adresser ces crises, car la plupart des définitions demeurent apolitiques, jètent le blâme sur la victime, ou ne tiennent pas compte du contexte élargi, ce qui limite la « politique du possible ». Néanmoins, en tant que concept basé dans le savoir, l'éducation à l'alimentation a le potentiel de jouer un rôle clé dans l'éducation des adultes et les comportements sociaux. En se référant aux trois domaines de savoirs d'Habermas (1978) et à la théorie avancée par Freire (1976) selon laquelle toute forme d'éducation est d'ordre politique, une nouvelle approche en matière d'éducation à l'alimentation permet d'analyser les modes de réflexion actuelles par rapport à l'alimentation et de modeler des alternatives qui tiendront la route.

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© Canadian Association for the Study of Adult Education/ L'Association canadienne pour l'étude de l'éducation des adultes Literacy has always been central to the field of adult education—from its beginnings in organizations like the Mechanics' Institute and Frontier College to its current association with street youth, immigrants, and high-school dropouts. Within the field, literacy has taken many forms, such as functional literacy, computer literacy, and ecological literacy.

But these forms of literacy do not address a growing and interconnected set of issues that focus on food, including the power of transnational food corporations, the rise of various food movements, and the recurrence of global food crises, along with the shocking revelation that there are now as many obese people in the world as there are starving ones. We need a new form of literacy—food literacy—to help us analyze and address these issues. While some other disciplines have adopted this term (e.g., nutrition, marketing, and teacher education), adult education is just beginning to open up to questions of food and food literacy (see, for example, Liu, 2008, 2010; Sumner, 2008a; Waterman, 2008). As a field that is deeply concerned with social movements and social change, adult education can infuse its expertise in literacy with the aspect of food—a critical combination, because, in the end, we all eat.

This paper will explore a new and vital form of literacy—food literacy. After outlining the methodology and theoretical framework, the paper will provide a brief overview of the concept of literacy. Then it will move to a discussion of the larger political-economic context of the global corporate food system before examining the central question of food literacy. The paper will conclude with some observations of the importance of food literacy for the field of adult education.

## Methodology and Theoretical Framework

This paper focuses on theorizing from the literature in order to develop a new conceptualization of food literacy. In essence, it involves a critical analysis of the nascent literature regarding food literacy while making connections to adult education. Standard Canadian texts were examined, such as Fenwick, Nesbit, and Spencer (2006) and English (2005), to provide background information on literacy itself. Since the concept of food literacy is so new, an Internet search was carried out in order to find some initial engagement with the term. The examination and search were carried out using a critical lens, keeping in mind the words of Canadian political economist Harold Innis, who proposed that the task for engaged intellectuals involves "questioning the pretensions of organized power" (as cited in Neufeld & Whitworth, 1997, p. 198).

This critical lens complements the political economy perspective that frames this paper. Based in Marxist social theory, political economy involves "not only the interrelationship between economics and politics, but also the interconnections between the various levels of social interaction, from the local through the national to the global" (Sumner, 2008b, p. 24). Like any theory, political economy has both weaknesses and strengths. For example, Youngman (1996) discusses what he feels is the key criticism of political economy—the significance it accords to class in shaping social relations. He points out that oppression based on sex or race or ethnicity is not derived from a position in the system of production. For this reason, he elucidates what he refers to as a transformative political economy of adult education, which he employs to overcome the class focus and

work toward social change. Such dynamic theory development not only helps to deal with the shortcomings of political economy, but also recognizes the analytical power and interdisciplinary reach that give this theory the capacity to address the deeply complex issues surrounding food and food literacy. Before discussing these central aspects of the paper, we begin with the basic concept of literacy.

## Literacy

Over time, the understanding of literacy has shifted from humanistic and citizenship frames to an economic one (Taylor & Blunt, 2006), reflecting the neo-liberal values that have come to dominate public policy and programs. For example, in 2000, the International Adult Literacy Survey defined literacy as "the ability to understand and employ printed information in daily activities, at home, at work and in the community—to achieve one's goals, and to develop one's knowledge and potential" (in Quigley, 2005, p. 384). A few years later, Human Resources and Skills Development Canada (in Taylor & Blunt) narrowed the understanding by conceptualizing literacy as "the capacities required by persons to function effectively in the social spheres of work, community, culture, and recreation, including reading, writing, numeracy, and the essential skills required for employment, such as computer use, document use, and working with others" (p. 326).

These differences in understanding point to tensions inherent in the study of literacy itself. According to Quigley (2005),

few areas of research or practice have engendered more public debate; few have become more contested or politicized in the entire field of adult education. In effect, it has held a mirror to society reflecting its most fundamental knowledge requirements, its loftiest aspirations, and many of its primordial fears for well over 2 centuries. (p. 381)

When literacy holds a mirror to society today, it does not like what it sees. It reflects an increasingly overweight population, the dominance of giant food corporations, and rising hunger around the world. This paper argues that a new form of literacy—food literacy—is needed to address these problems, and the larger political-economic context guarantees that it will be just as contested as other forms of literacy.

### The Political-Economic Context of Food Literacy

While literacy is undoubtedly an integral aspect of adult education, why is food literacy important? The larger political-economic context of an increasingly powerful global corporate food system provides the answer. Starting in approximately the 1950s, the introduction of processed foods, the vertical and horizontal integration of food corporations, and the power of advertising combined to produce a situation where, by the turn of the century, 95% of American food was a corporate product (McMichael, 2000). In the drive for control of the global food system, agribusiness corporations have used international trade agreements and industrial forms of agriculture to establish plantations around the world to grow foodstuffs to sell wherever a market can be created, spawning an interconnected

suite of negative social, economic, and environmental consequences. Rosset (as cited in Albritton, 2009) sums up the situation when he asks:

Why must we put up with a global food system that ruins rural economies worldwide, drives family and peasant farmers off the land in droves, and into slums, ghettos and international migrant streams? ... That imposes a kind of agriculture that destroys the soil, contaminates ground water, eliminates trees from rural areas, creates pests that are resistant to pesticides, and puts the future productivity of agriculture in doubt? ... Food that is laden with sugar, salt, fat, starch, carcinogenic colours and preservatives, pesticide residues and genetically modified organisms, and that may well be driving global epidemics of obesity for some (and hunger for others), heart disease, diabetes and cancer? A food system that bloats the coffers of unaccountable corporations, corrupts governments and kills famers and consumers while wrecking the environment? (p. 200)

Many of the products associated with the global corporate food system have been described by Michael Pollan (2008, p. 1) not as food, but as "edible foodlike substances." Each year, Pollan points out, 17,000 new forms of such industrialized food are put on the market, backed by a \$32 billion marketing machine to persuade people to buy into what has been called the Western diet, which has "lots of processed foods and meat, lots of added fat and sugar—lots of everything, except vegetables, fruits and whole grains" (p. 10). Wherever the Western diet has been adopted, he maintains, Western diseases predictably follow: obesity, diabetes, cardiovascular diseases, and cancer. These so-called lifestyle diseases wreak havoc on human health in both developed and developing countries. For example, Lawrence (2011) reports that a United Nations summit in New York confirmed that nearly two-thirds of all deaths worldwide in 2008 were attributable to lifestyle diseases. Recently, the Western diet has been linked to Alzheimer's disease, which some scientists are now referring to as type 3 diabetes (Trivedi, 2012). And around the world, the drive for ever-increasing corporate profits contributes to globalizing the Western diet. In this vein, Lawrence points out that in low- and middle-income countries, global food and drink corporations have been opening new markets among people living on \$2 per day. For these firms, "the world's poor have become their vehicle for growth" (p. 8).

Little wonder that food literacy is an important, and contested, topic, especially in light of McMichael's (2000) observation that food is not just a commodity, but a way of life with deep material and symbolic power for most people in the world. By embodying the links between nature, human survival, health, culture, and livelihood, food has "become a focus of contention and resistance to a corporate takeover of life itself" (pp. 31–32).

#### **Food Literacy**

The concept of food literacy has emerged with the rise of food movements and the growth of interest in food issues. A new term, its current meanings hint at a concept under construction. For example, the Food Literacy Project (2011) defines food literacy as the ability to organize one's everyday nutrition in a self-determined, responsible, and

enjoyable way. Wiser Earth (2007), a social network for sustainability, puts forward a more encompassing definition: "Food literacy refers to the degree to which people are able to obtain, process, and understand basic information about food in order to make appropriate health decisions. Food literacy encompasses understanding labeling on food and knowledge of nutrition" (n.p.).

As part of their larger concept of food well-being (defined as a positive psychological, physical, emotional, and social relationship with food at both the individual and societal levels), Block et al. (2011) provide a nuanced engagement with food literacy. For these authors, food literacy is more than knowledge; it also involves the motivation to apply nutrition information to food choices. While food knowledge involves the possession of food-related information, food literacy entails "both understanding nutrition information and acting on that knowledge in ways consistent with promoting nutrition goals and FWB [food well-being]" (p. 7). To bolster their argument, Block et al. put forward three main components of food literacy:

- Conceptual or declarative knowledge—reading and acquiring knowledge about food, food sources, nutrition facts, and other knowledge acquisition and apprehension activities involving food and nutrition
- 2. Procedural knowledge—applying such knowledge to food decision making, including food shopping and preparation skills. Procedural knowledge requires the development of food scripts—food-related sequences of events, actions, or routines that occur in a particular context (e.g., how to shop for, prepare, and sauté fresh broccoli). These food and nutrition scripts and procedural knowledge support a person's food goals and food well-being
- 3. The ability, opportunity, and motivation to apply or use that knowledge—having the ability, opportunity, and motivation to identify, understand, interpret, communicate, and use information about food in various contexts

Block et al. make it clear that all three components are necessary to achieve food literacy; if one or more components is missing, the goal of food literacy is not met. And following their understanding of food literacy, Block et al. define food *illiteracy* as a deficiency in food knowledge and inadequate ability, motivation, and opportunity to acquire and apply that knowledge. But just as literacy is a highly contested term, the new concept of food literacy is also being challenged.

## A Critique of Food Literacy

In her article on food education as food literacy, Kimura (2011) argues that the food literacy approach is highly individualistic and apolitical. While acknowledging that there is a wide consensus that citizens do not know enough about food and should become more informed, she refers to Guthman (as cited in Kimura, 2011), who points out that current food knowledge emphasizes "consumer choice, entrepreneurship, and self-improvement—

elements that exacerbate neoliberal subjectivity and limit 'the practice of the possible'" (p. 466).

For Kimura (2011), food literacy involves an individualized understanding of food choice, dietary behaviour, and culinary practices. Otherwise put, inappropriate behaviours and practices are prevalent because individuals lack nutritional knowledge, cooking skills, or understanding of health impacts. For Kimura, "the remedy (e.g., food education) therefore is to supply sufficient knowledge and skills" (p. 479).

When comparing food literacy to health literacy, Kimura (2011) maintains that an individualized approach not only entails a relatively simplistic understanding of the relationship between communication and behaviour change, but also fails to take into account social, cultural, economic, and environmental factors. She contrasts an individualized food literacy framework with a more structural one, which sees food-related behaviours and practices as functions of a number of parameters: cultural and social influence, class position, gender stereotypes, social infrastructure, and the macrostructure of food and agricultural systems. In essence, Kimura concludes, food literacy "effectively depoliticizes food education" (p. 480), which then becomes

a project of individual training and provision of information for people to "make a right choice," without critically examining how individuals' choices might be constrained or shaped by a wide range of factors. By equating the improvement of personal knowledge and skills to the solution, the food literacy concept implicitly blames individuals for food problems and crises. (p. 480)

Kimura proposes a broader kind of food education, aiming at a wider range of issues such as "changes in public policy, societal resource allocation, institutional practices, and economic and social conditions that shape individuals' and communities' control over food" (p. 480). And while she dismisses the concept of food literacy altogether, can it be rehabilitated to engage with these issues and unleash the practice of the possible?

#### **Reframing Food Literacy**

To effect positive change in a globalizing world, food literacy must move beyond individualized prescriptions and notions of blame to become a concept that can analyze current foodscapes and model sustainable alternatives.

As a knowledge-based understanding, food literacy holds great promise. But Block et al.'s (2011) three components of food literacy—conceptual or declarative knowledge; procedural knowledge; and the ability, opportunity, and motivation to apply or use that knowledge—spring from an individualized approach. We need a broader knowledge framework that can address Kimura's (2011) critiques and rehabilitate the term: Habermas' three knowledge domains.

In his study of knowledge and human interests, Jürgen Habermas (1978) challenged the dominance of instrumental forms of knowledge by presenting a framework that involved three knowledge domains. The first knowledge domain he called empirical/analytic knowledge, which Morrow and Torres (1995) describe as being "based upon a

desire potentially to control through the analysis of objective determinants" (p. 24). Instrumental knowledge would fit into this category. In terms of food literacy, Block et al.'s (2011) three forms of knowledge would belong in this domain: nutrition facts, food sources, and food shopping and preparation skills.

The second knowledge domain Habermas (1978) called historical-hermeneutic knowledge. This is knowledge that Morrow and Torres (1995) describe as "based upon a desire potentially to ... understand through the interpretation of meanings" (p. 24). Discourse analysis, narratives, and "women's ways of knowing" (Belenky, Clinchy, Goldberger, & Tarule, 1986) are all forms of historical-hermeneutic knowledge. In terms of food literacy, advertising and branding analysis, culinary histories, the emotional appeal of "comfort foods," and the ambivalent relationship many people have with food (e.g., bulimia, anorexia, and body-image issues) would all belong in this domain.

The third knowledge domain Habermas (1978) called critical-emancipatory knowledge. This is knowledge "based upon a desire potentially to ... transform reality through the demystification of falsifying forms of consciousness" (Morrow & Torres, 1995, p. 24). Transformative learning, critical reflection, and liberatory praxis are all part of critical-emancipatory knowledge. In terms of food literacy, the knowledge mobilization associated with food justice movements, the demands of food sovereignty, and a critical understanding of issues like food deserts would all be forms of critical-emancipatory knowledge.

Instead of prioritizing one domain of knowledge, Habermas (1978) argued that humans need all three kinds of knowledge. Such a tripartite epistemology is more encompassing than Block et al.'s (2011) narrow focus on individualistic, instrumental forms of knowledge as the basis of food literacy. Without including historical-hermeneutic and critical-emancipatory forms of knowledge, food literacy is doomed to remain a shallow, apolitical, individualistic conceptualization that will contribute little, if anything, to social change.

Paulo Freire (1976) has reminded us that all education is political, including literacy. In other words, to ignore the larger context and remain within one narrow domain of knowledge is just as political as serving food to the poor on the sidewalks in front of prosperous businesses (as the food justice movement called Food Not Bombs does) or driving a tractor into a McDonald's franchise (as French farmer José Bové did to protest the damage to local food cultures by the fast-food giant). Freire maintains that he never reduced literacy to a set of techniques and methods. In his approach to literacy,

knowledge does not come as a formula or a "slogan." Rather, it is a fundamental way of being for individuals who work to re-create the world which they inherited and, in this process of construction and reconstruction, remake themselves ... When the separation between thought and language and reality no longer exists, then being able to read a text requires a "reading" of the social context from which it came. (p. 71)

In her study of school gardens, Yamashita (2008) touched on some of the components necessary for a reframed understanding of food literacy that can "read the

world." She defined it as "the ability to understand where food comes from and how it is produced, appreciate the cultural significance of food, make healthy decisions and recognize the implications—social, environmental, political, cultural and economic of the food we eat" (p. 5).

The strengths of this definition include the appreciation of the cultural significance of food, the recognition of the broad spectrum of impacts of our food purchases, and the embrace of the social, highlighted by the use of "we." Using Yamashita (2008) as a basis, combined with Habermas' tripartite epistemology and Freire's educational politics, a reframed understanding of food literacy would be as follows:

Food literacy is the ability to "read the world" in terms of food, thereby recreating it and remaking ourselves. It involves a full-cycle understanding of food—where it is grown, how it is produced, who benefits and who loses when it is purchased, who can access it (and who can't), and where it goes when we are finished with it. It includes an appreciation of the cultural significance of food, the capacity to prepare healthy meals and make healthy decisions, and the recognition of the environmental, social, economic, cultural, and political implications of those decisions.

## Food Literacy and Adult Education

Adult education has been slow to engage with food-related issues (Sumner 2013) despite the fact that food is not only "an *object* of learning, but it is also a *vehicle* for learning" (Flowers & Swan, 2012, p. 423). The potential of food to be a catalyst for learning and social change creates fruitful linkages between food literacy and adult education that can unleash the practice of the possible. Three instructive areas of interconnection include food pedagogies, social movements, and the traditions of Canadian adult education.

Food pedagogies represent a new educational sub-field pioneered by Australian adult educators Flowers and Swan (2012, in press). For these scholars, food pedagogies refer to

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. (p. 425)

Flowers and Swan (in press) adopted the term *food pedagogies* because they found it both broad enough to cover a range of pedagogical issues and narrow enough to denote "some kind of intended or emergent change in behaviour, habit, emotion, cognition, and/ or knowledge at an individual, family, group or collective level" (p. 4). In this way, they use the term to refer to more than just learning outside the classroom. It also includes "the power relations involved in educative and learning technologies and processes" (p. 4).

Following Flowers and Swan (2012, in press), food literacy can be understood as a type of food pedagogy—one of the congeries of education, teaching, and learning

associated with food. And as with food pedagogies, food literacy aims for individual and social change by encouraging people to read the world in terms of food. In addition, food literacy includes an engagement with power relations in its full-cycle understanding of food. Learning to read the world and engaging with power relations can help dismantle the limits placed on the practice of the possible and move beyond neo-liberal subjectivities to more holistic ones.

Another area of interconnection between food literacy and adult education is social movements. A social movement can be understood as "a network of informal interactions between a plurality of individuals, groups and/or organizations, engaged in political or cultural conflict on the basis of a shared collective identity" (Diani, 1992, p. 13). Social movements are generally divided into two types: old social movements composed of organized labour, and new social movements such as the environmental movement, the peace movement, and women's movements. While old social movements are class-based, practise recognized strategies such as strikes and working to rule, and get involved in organized politics, new social movements are more issue-specific, cut across class lines, employ a wide variety of unconventional tactics, and operate more outside the realm of organized politics (McCarthy, 2000).

Some of the most recent new social movements are food movements. The Slow Food movement, the local food movement, the food justice movement, the fair trade movement and the organic farming movement are all examples of social movements that have coalesced around food. Like other new social movements, these food movements focus on particular issues, such as heritage foods, local food systems, food security and/or sovereignty, fair wages for farmers, and environmentally sustainable farming. They also aim to cut across class lines (some more than others) and encourage a wide range of people to address the growing corporate control of the food system by employing a wide variety of tactics.

Social movements, including food movements, are vital sites of learning. The learning associated with social movements, not surprisingly, has been labelled social movement learning. According to Hall and Clover (2005), "Social movement learning is both (a) learning by persons who are part of any social movement; and (b) learning by persons outside of a social movement as a result of the actions taken or simply by the existence of social movements" (p. 584).

When considering the kinds of learning associated with food movements, we can look to Merriam's (2005) categorization of the major distinguishing aspects of adult learning: andragogy, self-directed, transformative, critical, and spiritual. While these categories overlap, they can help us understand the kind of learning that occurs within food movements. Following Merriam's categorization in terms of social movement learning, we can posit that andragogy will include university courses on the subject of food movements, a weekend chef school hosted by a local food organization, or an organic food-tasting event. Self-directed learning would include an independent reading and research course on an issue such as food sovereignty, a weekend set aside to read about and try baking bread, or knowledge acquisition from watching a film such as *Food Inc*. Transformative learning would include a university course on food and the social economy, a workshop on fair trade, or a visit to an organic farm. Critical learning would include a university course on

food pedagogies, a seminar on guerrilla gardening, or a discussion at the farmers' market about the merits of free-range eggs. And spiritual learning would include a course on food justice and spirituality, an event focused on mindful eating at a yoga retreat, or an epiphany when eating a plateful of food you have helped to grow.

Food literacy could emerge from all five kinds of learning in Merriam's (2005) categorization. Learning to prepare healthy meals using local food, to understand where our food comes from, to appreciate the cultural significance of heritage foods, to resist the marketing messages associated with junk food, and to practise mindful eating lays the groundwork for food literacy. Such learning can open up the practice of the possible and encourage people to become more than the neo-liberal subjectivities the market encourages.

A third area of interconnection between food literacy and adult education focuses on the traditions of Canadian adult education. In the introduction to the edited collection, *Contexts of Adult Education: Canadian Perspectives*, Nesbit (2006, p. 17) outlines the three main and enduring traditions of Canadian adult education:

- A set of unyielding social purposes informed by passion and outrage and rooted in a concern for the less privileged
- A systematic and sustained philosophical and critical analysis that develops the abilities to connect immediate, individual experiences with underlying societal structures
- A keen attention to the specific sites, locations, and practices where such purposes and analyses are made real in the lives of Canadians

For Nesbit, the practice of adult education is not about a set of abstract concepts, but constitutes one aspect of "a broader and vital mission for 'really useful knowledge' that helps create a more equitable world at individual, family, community and societal levels" (p. 17).

Food literacy is an instructive concept through which to operationalize the three traditions of Canadian adult education. For example, simply learning nutrition information and practising shopping and cooking skills will not meet the inherent demands these traditions place on adult educators, for a number of reasons. First, such learning will not serve the less privileged, including those who live in food deserts and can access only the low-priced junk food associated with the Western diet that is available in fast-food outlets and convenience stores. Second, it will not help people to analyze why food deserts exist, why junk food costs less than fresh fruits and vegetables, and why food is not a human right. And third, it will not make these connections real in people's lives, which would open the door to social change. For food literacy to be relevant to adult educators in a globalized world, it must move beyond the individual, atomized consumer to the social plane, with a bias toward the less privileged. It should also have the analytical capacity to read the world and link that reading back to specific foodways. And it needs to be attentive to the spaces and places where these two obligations play out in the lives of adult learners. If food literacy meets the demands the traditions place on adult educators, it can contribute to the production of really useful knowledge and expand the practice of the possible—the

creation of a more equitable world where everyone is fed within the biological limits of the planet.

#### Conclusion

Food literacy is a concept that the field of adult education can use to address questions we face every day: How should we interpret food labels? Why is food full of empty calories cheaper than nutritious food? Is it better to eat organic or local food? Why is hunger increasing in a world that is becoming richer? Why should we care if farmland is sold for housing developments? By addressing these questions and looking for answers, we can unleash the practice of the possible, move beyond neo-liberal subjectivities, and aim for the more equitable world envisioned by Nesbit (2006). Levine (as cited in Quigley, 2005) has remarked that "the social and political significance of literacy is very largely derived from its role in creating and reproducing—or failing to reproduce—the social distribution of knowledge" (p. 383). The same can be said of food literacy. Following Freire and Habermas, food literacy can help people read the world through the social construction and sharing of all three domains of knowledge in the realm of food, producing really useful knowledge that can lead to a more equitable world. Without this knowledge, we will remain vulnerable organisms in a hostile food environment.

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