Theorising community gardens as pedagogical sites in the food movement

Pierre Walter*

Department of Educational Studies, University of British Columbia, Vancouver, Canada

(Received 29 February 2012; final version received 3 July 2012)

Community gardens are rich non-school sites of informal adult learning and education in the North American food movement. To date, however, they have seldom been the subject of research in environmental education. This paper argues that theorising on public pedagogy and social movement learning from the field of Adult Education might effectively be applied to frame the study of learning in community gardens. A brief history of community gardens in the USA is first given, followed by an overview of theory on social movement learning. A review of empirical research on the individual and collective benefits of participation in community garden initiatives is then used to illustrate the potential for research on the connection between learning and these benefits. The paper concludes with a discussion of implications for further research.

Keywords: community gardens; adult learning; public pedagogy; social movement learning

Introduction

Since the 1970s, research in environmental education has been positioned mostly in relation to formal schooling for children (Rickenson 2001). When adults do appear, their experience is often analysed in terms of relationships to children; for example, in scholarship on intergenerational environmental learning (Duvall and Zint 2007). Outside of school, nonformal and informal environmental education for adults and children alike is under-researched and undertheorised (Dillon 2003), although free-choice learning in informal settings is currently a growing area of research (Ballantyne and Packer 2005). As Falk (2005, 2) argues, ‘worldwide, most learning, and in particular most environmental learning, is acquired outside of school’. These non-school sites of free choice, experience-based learning include places like museums, science centres, botanical gardens, aquariums, zoos, visitor centres, parks and gardens. Skanavis and Sakellari (2012, 9) point out that in these non-school settings, ‘free-choice learning programmes can encourage the development of citizens’ skills for collective environmental action, if the citizens already acquire the interest, motivation and values needed to become appropriately educated’.

In the field of adult education, scholarship on public pedagogy, and social movement learning, respectively, also addresses the informal adult learning which takes place in non-school settings. In the first instance, public pedagogy refers to the
various forms, processes, and sites of education and learning that occur beyond the realm of formal educational institutions – including popular culture (i.e. movies, television, the Internet, magazines, shopping malls), informal educational institutions and public spaces (i.e. museums, zoos, monuments), dominant discourses (i.e. public policy, neoliberalism, global capitalism), and public intellectualism and social activism (i.e. academics who engage with the public outside of the academy, grassroots organizations, and social movements). (Sandlin, Wright, and Clark 2011, 2)

Central to conceptions of public pedagogy is the question of how it supports or hinders transformational learning; that is,

how informal cultural institutions such as museums, zoos, botanical gardens, and parks help shape dominant forms of knowledge and hegemonic representations, as well as how they can be sites of contestation and resistance. (Sandlin, Wright, and Clark 2011, 6)

Thus, theorising in public pedagogy expands the scope of free-choice learning to include the role of popular culture, dominant discourses, and social activism in education and learning. In particular, it looks at how pedagogical sites might promote or impede transformational learning of the public.

A second, and related body of scholarship, on social movement learning, encompasses both free-choice and transformational learning, but with a more direct focus on social movements as ‘pedagogical sites’ for learning (Hall et al. 2011). Social movements are taken to be ‘new’ social movements (peace and environmental movements, feminist, gay rights and other ‘identity’ movements), as opposed to ‘old’ social movements (union and labour movement, working-class political parties). Social movement learning refers to both

(a) learning which occurs by persons as part of any social movement, and (b) learning that occurs by those outside of a given social movement because of the actions of the social movements themselves. (Hall 2006, 361)

The focus here is primarily on how adult learning fosters ‘concientización’ and socio-environmental change (Clover 2002). ‘Concientización’ and transformational learning are taken here not so much in the tradition of ‘rational’ stage models of individual transformative learning (Mezirow 2009), but in the more holistic, cosmological notions of transformational learning in social movements towards an ecological consciousness (O’Sullivan and Taylor 2004). Other theoretical work on adult learning, particularly theories of communities of practice and social learning (Lave and Wenger 1991; Wenger 1998), and place-based education (Gruenewald 2003; Sobel 2004), are also relevant to the study of adult learning in community gardens (Krasny and Tidball 2009), but are beyond the scope of this paper.

Theorising on learning in social movements seeks to explain how these movements function as civil society sites of grassroots ‘contestation and resistance’ of dominant cultural codes and institutions, and what role adult learning and education plays within this (Foley 1999; Hall 2006; Walter 2007a). In social movements, adults are seen to engage in many forms of learning in addition to formal education, both as individuals and collectively. These include informal, self-directed, incidental and non-formal learning. Informal learning occurs when adults learn ‘naturally and socially’ in the context of family, community, workplace and social movements, including the environmental movement (Foley 1999). Informal learning may be
self-directed or incidental (Schugurensky 2000). *Self-directed learning* is purposeful and may be consciously planned and organised by adult learners, but does not rely on the help of educators, although they may serve as learning resources. *Incidental learning*, by contrast, is unintentional and refers to ‘learning experiences that occur when the learner did not have any previous intention of learning something out of that experience, but after the experience she or he becomes aware that some learning has taken place’ (Schugurensky 2000, 4). *Nonformal learning* is systematic, organised learning which occurs in nonformal education: in workshops, training programmes, outdoor education, interpretive programmes, and other educational programmes like guitar or Tai Chi lessons, cooking, pottery, tennis or gardening. Non-formal education is usually short term and voluntary, and has teachers and a curriculum, but is generally flexible and adaptable to the needs and interests of learners. It again takes place in a range of non-school settings – including community centres, parks, zoos, museums, school buildings, workplaces and gardens.

In theoretical terms, social movements, including the environmental movement, are seen as pedagogical sites for adult learning which foster communicative dialogue, collective identity, democratic civil society and socio-environmental sustainability (Welton 2001, 2002; Hall 2006). In the food movement, such learning involves envisioning, creating and enacting alternatives to the industrial food system, to consumerism, to Green Revolution technologies of heavy pesticide, herbicide and chemical fertilizer use, to industrial scale mega farms, to genetically modified plants, factory-based mass production of chickens, cattle and pigs and so on. Community gardens are one among many food movement strands in civil society, alongside farmers markets, organic farms, slow food, window farming, local food, fair trade and food cooperatives. Reflecting their broad geographic and societal scope, the American Community Garden Association (2012) defines community gardens as:

> Any piece of land gardened by a group of people … It can be urban, suburban, or rural. It can grow flowers, vegetables or community. It can be one community plot, or can be many individual plots. It can be at a school, hospital, or in a neighborhood. It can also be a series of plots dedicated to ‘urban agriculture’ where the produce is grown for a market.

As sites of food security, community development and social justice for poor people, community gardens can be found in

- schoolyards and vacant lots, abandoned tracts of brownfield land, any plot of any size and condition that can be used to grow food right in the middle of the community that needs it. (Allen 2010, 32)

As sites of creative resistance to the strictures of private property, rapacious developers and onerous government regulation, some community gardens are seen to involve ‘gardening public space with or without permission’ (Tracey 2007, 4).

In the present day, the community garden movement is flourishing. In the USA and Canada, community gardens exist both as a core project of green urban planning supported by municipal, state/provincial and national government bodies and as the keystone of a popular urban agricultural movement. Community garden initiatives are in fact proliferating in urban communities around the world, from the UK, Germany, Spain and Denmark to Mexico, Brazil, Cuba and Australia (City Farmer 2012). On
the individual level, research has demonstrated how community gardens are con-
nected to spirituality, self-esteem, job skills, leadership, human health and nutrition,
cultural expression, personal growth, livelihood, ecology and environmental ethics
the societal level, studies have likewise shown strong connections between commu-
nity gardening and food security, community safety, multiculturalism, democracy,
decolonisation, greening of cities, food sovereignty and environmental justice (Saldi-
var-Tanaka and Krasny 2004; Shinew, Glover, and Parry 2004; Glover, Shinew, and
Parry 2005; Levkoe 2006; Krasny and Tidball 2009; Mundel and Chapman 2010;
Stroink, Nelson and McLaren 2010). All of these many functions of community gar-
dens are clearly predicated on adult learning, yet this foundational connection has sel-
dom been the explicit subject of research or theorising. There is clearly some overlap
here with scholarship on children’s environmental learning in outdoor classrooms and
school gardens (Coffey 2006; Louv 2008) and in place-based education (Gruenewald
2003; Sobel 2004; Ardoin 2006), but very little of this work focuses on adults and
informal learning in non-school-based settings for community gardens.

This paper argues for the conceptualisation of learning in community gardens as
a form of public pedagogy and social movement learning. Notions of public peda-
gogy are used mainly to frame the history of community gardens; theorising on
social movement learning is applied to an analysis of research literature on present-
day community gardens. A brief history of community gardens in the USA is first
given, followed by an overview of current theorising on social movement learning
as this might be applied to the food movement and to learning in community gar-
dens in particular. Drawing on a review of research literature on the benefits of par-
ticipating in community gardens, the connection between individual learning, and
then collective learning in community gardens is then hypothesised. The paper
concludes with a discussion of implications for research on adult learning in
community gardens as a pedagogical site in the food movement.

A brief history of community gardens

Community gardens have been a constant presence in US society for over a century
(Bassett 1981; Van Hassell 2002; Lawson 2005). Originally focused primarily on
urban and social reform, poverty relief and the construction of model citizens, and
later on serving national war efforts, community gardens have evolved in recent times,
first as a grassroots movement for community organising and empowerment, and then
as a pillar of urban greening policies and a critical stream in the urban food move-
ment. Throughout this history, the success of community gardens has appeared to rest
in large part on the informal learning and adult education taking place in and around
them. However, in early periods, this learning, as public pedagogy, was largely
designed to reinforce dominant ideologies; while after the 1960s, community gardens
more readily embraced a public pedagogy of contestation and resistance. This has
continued into current community garden efforts as part of the larger food movement.
Four historical periods of community gardens can be identified: (1) the urban reform
and self-help gardens of 1890s to First World War (also paralleled in the Great
Depression), (2) the war-time gardens of First World War and Second World War, (3)
the grassroots community garden movement of from the late 1960s to the 1980s and
(4) the great local expansion of community gardens, green cities and urban agriculture
from the 1990s to the presentday.
In the first period, from the 1890s to First World War, urban reformers led a movement to convert vacant city lots to gardens providing ‘self-help’ charity relief (food, skills and income) to poor and unemployed people, and to educate immigrants in dominant norms of productive labour and self-reliant citizenship. At the same time, schoolyard gardens were established to instil a love of nature in low-income, immigrant, native American and ‘delinquent’ children, to promote thrift and efficiency, and to provide training in agricultural skills, science, civic responsibility and industrial work processes. At the level of the city, gardens were a vital component of urban beautification campaigns by wealthy civic reformers, with the hope that gardeners in crowded urban tenements would ‘develop the skills and motivation to seek new careers and home environments, preferably farming in rural areas or at least suburban living’ (Lawson 2005, 22). In general, this period of community gardens for urban reform, assimilation of immigrants, and socialisation of citizens to ‘hygienic’ and ‘productive’ norms of behaviour might be seen as a form of ‘hegemonic’ public pedagogy reinforcing assimilation to dominant cultural mores, ideologies and social class.

In the second historical period, from 1917 to 1945, community gardens were positioned as patriotic service for the national military effort, and as a response to economic crisis (Bassett 1981; Lawson 2005). Echoing the garden reform movement of the 1890s, during the Great Depression of the 1930s, relief gardens returned as a source of self-help, productive skills, and subsistence food for thousands of unemployed people. Moving beyond relief, the Liberty Gardens of First World War, and Victory Gardens of Second World War served the added imperative of patriotism and war. These gardens were seen to provide a unified front of orderly, industrious citizens supporting military efforts, a critical source of nutritious food and a healthy recreational outlet for ordinary citizens in a time of strife. By 1944, a staggering 20 million Victory Gardens were producing 40% of all fresh produce consumed in the USA (Bassett 1981, 7). As in the earlier period of self-help gardens, education was central to the campaigns for war gardens. Paralleling rural agricultural extension efforts of the time, US federal government agencies, universities, private corporations and community organisations developed training, educational materials, and radio and film programmes on the techniques of urban agriculture. Also promoted at the time was the idea that anyone who did not garden was a ‘slacker’ unsupportive of the war efforts (Lawson 2005, 139). That is, to be a good US citizen was to be a good community gardener. Again, together with the basic and vital provision of food for people, a hegemonic public pedagogy of order, industry and patriotism can be discerned in community garden initiatives of these war periods.

In the 1950s, following the post-Second World War suburban housing boom, the popularity of community gardens waned, as individual homeowners tilled their private yards and gardens, and enjoyed a time of relative economic prosperity and food abundance. However, with the social movements of the 1960s and environmental movement of the early 1970s, the community garden movement was reborn. In the 1970s and 1980s, during the third historical period of community gardens, they became a vibrant part of urban movements for community development, ecological revitalisation, human health, food security and social justice. Reflecting shifts in urban planning in the 1970s and 1980s towards more open green spaces, government policies also began to move towards community empowerment and development as a key to urban revitalization (Lawson 2005). At the same time, a
growing number of grassroots community groups and coalitions worked to reclaim derelict land as community garden space. This happened in the takeover of vacant lots, guerrilla gardening, campaigns to resist developers and city hall, and the active building of community identity, networks and leadership (Van Hassell 2002; Lawson 2005; Tracey 2007; Haeg 2010). In this third era, a ‘counter-hegemonic’ public pedagogy began to be enacted in community gardens, as they became sites of contestation and resistance in the struggle for grassroots urban renewal and community development.

Finally, from the 1990s to the present, community gardens have grown rapidly in both number and scope as part of our contemporary food movement (Levkoe 2006; Pollan 2010; City Farmer 2012). This is a social movement which has grown in part out of a concern with food-borne illnesses, food safety, obesity and other health concerns in the 1980s and 1990s. In an essay entitled ‘Food Movement, Rising’, advocate and journalist Pollan (2010, 31–2) captures some of the diversity of the food movement and its various sites of activism, including, but not limited to, community gardens:

… we can include school lunch reform; the campaign for animal rights and welfare; the campaign against genetically modified crops; the rise of organic and locally produced food; efforts to combat obesity and type 2 diabetes; ‘food sovereignty’ … farm bill reform; food safety regulation; farmland preservation; student organizing around food issues on campus; efforts to promote urban agriculture and ensure that communities have access to healthy food; initiatives to create gardens and cooking classes in schools; farm worker rights; nutrition labeling; feedlot pollution; and the various efforts to regulate food ingredients and marketing, especially to kids.

Pollan (Ibid., 32) continues his argument to explain how the food movement helps to create social and ecological spaces for the construction of democratic civil society: ‘What is attracting so many people to the movement today (and young people in particular) is a much less conventional kind of politics, one that is about something more than food. The food movement is also about community, identity, pleasure, and, most notably, about carving out a new social and economic space removed from the influence of big corporations on the one side and government on the other’.

Echoing Pollan, Flammang (2009, 228), in her work on food, politics and civil society, identifies community gardens in particular as a vibrant site in the nurturing of civil society:

The bonds of civil society are reinforced in a variety of garden settings: community, urban, youth, school, and jail. Like (dinner) tables, gardens are great levelers. They require cooperative effort, produce a tangible common good, and provide familiar topics of conversation.

In a study of community gardening and its role in social justice advocacy, Levkoe (2006) examines community gardens as one among several sites of transformational learning in the food movement. As Levkoe (Ibid., 90) explains it,

… food justice movements (are) a valuable site for countering the identity of the person only as a consumer, and as a place for learning active democratic citizenship. Food offers a unique opportunity for learning because it has the power to galvanize people from diverse backgrounds and opinions .... Participation in food justice
movements encourages the development of strong civic virtues and critical perspectives along with the necessary experience for shaping policy makers’ decisions. Food justice activism has the ability to increase the confidence, political efficacy, knowledge, and skills of those involved.

In short, present-day community gardens can be vibrant sites of ‘counter-hegemonic’ public pedagogy and social movement learning. The next section discusses how social movement learning is understood in the adult education literature, and how it might be applied to frame community gardens as a pedagogical site within the food movement.

**Theorising learning in the food movement**

Learning in social movements, including the environmental movement, as noted above, refers to ‘learning by persons who are part of a social movement, or learning by persons outside as a result of the actions taken, or simply by the existence of social movements’ (Hall and Turay 2006, 1). Social movement learning is seen as both individual and collective (Kilgore 1999), instrumental to the construction of civil society (Welton 2001) and may be informal, self-directed and incidental. As Hall (2006, 363) tells us,

> social movements play significant roles in creating new knowledge and new lessons for global learning … the incubational capacity, the space for cognitive praxis or the capacity to create epistemic communities may be the most profound contribution of social movements … social movement actors are at once knowers, learners and teachers leading to diversification of knowledge.

In the environmental and other social movements, education and learning is not so much about individual behavioural change, but ‘educative-activism’ and consciousness-raising (Clover 2002, 318):

> **Concientización**, as the basis of educational work, is about recognising, respecting and nurturing people’s (sometimes hidden) ecological knowledge(s) and their experiences through a lens of economic and political structures and forces that contribute to environmental problems and the undermining of an ‘active’ citizenship.

The learning which takes place within social movements encompasses several different philosophical traditions, principles and practices of adult environmental education. These include liberal, progressive, humanist and radical adult education, but in the main exclude behaviourist philosophies (Walter 2009). Each philosophy has different understandings of the nature of adult learners, the role of educators, instructional strategies, and the assessment of learning, but all are found in the diverse practices of informal adult learning and education in social movements. Briefly, in the liberal philosophical tradition, educators are seen to be the source and authority for knowledge; learners are more or less considered ‘empty vessels’ to be filled with knowledge. Educators here guide learners through curriculum content and the contemplation of materials – in lectures, suggested readings and discussion of books, films or other curricular materials. This often takes place in a form of Socratic Dialogue which claims the epistemological authority of Science (e.g. in nature interpretation in botanical gardens or parks). In the progressive tradition, the educator may be more of a guide to learner centred, experiential and hands-on...
learning. Experimentation, problem solving, the application of the scientific method, apprenticeship, observation and demonstration are often integrated into the curriculum here (e.g. in science-based outdoor education programs). In the humanist tradition, learning is holistic, subjective, promotes self-awareness and personal growth, and often takes place through cooperation in groups. The educator here is a facilitator who establishes a safe learning climate, draws on the experience, knowledge and creativity of learners, who may be involved in art, music, food, cultural rituals, meditation and spirituality as part of the curriculum (e.g. in community arts and nonformal environmental education programs). Finally, in the radical tradition, learning may take place in problem-posing education, in dialogue and reflection, and educative-activism in environmental protest (Clover 2002). Social movement learning involves many of the learning activities outlined for all four traditions: teach-ins and the study of environmental issues and technical knowledge, hands-on learning, art, music, rituals, educative-activism and so on.

In broader terms, theorising on social movement learning has posited a close connection between adult learning and the construction of civil society, drawing heavily on the work of Jürgen Habermas, Antonio Gramsci and Paulo Freire, among others (Holst 2002; Hall 2006). From Habermas comes the notion that social movement learning helps defend the lifeworld (civil society) against incursions of the system (the state and economy). While state institutions, the market and multinational corporations seek to regulate, control and dominate the lifeworld, and to indoctrinate citizens as uncritical consumers, docile workers and apolitical citizens, the pedagogical practice of ‘communicative interaction’ (informal communication and democratic deliberation) – in voluntary associations, coffee houses, political parties, the family, community organisations and social movements at large – bolsters civil society, creates new knowledge, challenges the system, and proposes alternatives to it (Welton 2002). Pollan (2010, 33), for example, narrates how communicative interaction in civil society is enacted in farmers’ markets across North America:

Farmers’ markets are thriving, more than five thousand strong, and there is a lot more going on in them than the exchange of money for food. Someone is collecting signatures on a petition. Someone else is playing music. Children are everywhere, sampling fresh produce, talking to farmers. Friends and acquaintances stop to chat. One sociologist calculated that people have 10 times as many conversations at the farmers’ market than they do in the supermarket. Socially as well as sensually, the farmers’ market offers a remarkably rich and appealing environment. Someone buying food here may be acting not just as a consumer but also as a neighbor, a citizen, a parent, a cook. In many cities and towns, farmers’ markets have taken on (and not for the first time) the function of a lively new public square.

In the literature of adult education, similar pedagogical sites have been described in other social movement contexts. Duguid, Mündel, and Schugurensky (2007), for example, show how volunteer work in housing and alternative energy cooperatives, a community health coalition and a network of farmers promoted an analysis of political economy, civic virtues and learning and knowledge vital to democratic self-governance. Butterwick and Selman (2003) likewise illustrate how popular theatre acts as a site of pedagogical practice for democratic learning in civil society. Turning to cyberspace, Irving and English (2011, 362) demonstrate how the internet websites of feminist non-profit organizations are vital ‘sites of informal and
nonformal learning where citizens learn advocacy, literacy, and the practices of social democracy’.

In theorising social movement learning, the importance of Gramsci’s concepts of ideological hegemony and counter hegemony, and Freire’s ‘concientización’ is also evident (Clover 2002; Hall 2006). As a counter-hegemonic force, social movements are seen to promote democratic dialogue in civil society, challenge dominant ‘common sense notions of a natural and inevitable neoliberal state and corporate reordering of society’, and propose alternate visions of social change (Walter 2007b, 331). Sandlin and Walther (2009, 315), for example, show how some participants in the US voluntary simplicity movement question dominant norms of consumption, connected ‘overconsumption and overwork to capitalist modes of production, and engaged in social activism in their communities to address workers’ rights, poverty, and fair wages’. In this, they ‘reject society’s normative subjectivities and re-create more ethical ones’; in the process, they help to construct a counter-hegemonic ideology (Ibid., 298). Foley’s (1999) early work on learning in environmental, housing, workers’, women’s and liberation struggles also demonstrated how participants in social movements learn to deconstruct and oppose oppressive, dehumanizing and ecologically destructive practices and ideologies, and to construct alternative critical, emancipatory visions of society. In a similar vein, in relation to the food movement, Flammang (2009) argues that a de-gendered revival and revaluing of ‘foodwork’ and ‘table activities’ in the home and wider community – food preparation, eating together at the dinner table, table rituals and conversation, community gardens, meals and feasts, ceremonial and ritual foods, farmers markets, school gardens – is crucial to strengthening both civility and civil society. In this, she notes the importance of placing children at the household table (an argument she also extends to adults and community garden tables). She argues that (Ibid., 20):

> For democracy and civility to thrive, people need frequent, everyday occasions to share pleasures, fears, and opinions with others. The household table provides such a place. Children can learn about thoughtfulness and generosity, hear life stories from generations other than their own, and see how conflict can be managed without coming to blows. At the table, they can learn about their identity and what is expected of informed citizens. By becoming participants in meal preparation, they can learn that people have a responsibility to take the needs of others into account, without becoming martyrs to the needs of others [i.e. women under the traditional, oppressive division of labor]. By pitching into feed others, they can learn the importance of daily doses of gratitude for healthy social relations, and they can play an active role in creating greater good, which is the goal of civil society and democratic politics...The table activities that have been at the center of women’s lives in the historical division of labor should now be at the center of all our lives …

With these theoretical understandings in place, this paper now examines how adult learning likely plays out in present-day community gardens as a pedagogical site in the food movement.

**Learning about food, self, place and ecology**

A common thread running through all forms of community gardens – one which can be hypothesised as critical to their very existence – is the apparent importance of individual learning and education. This learning appears to be mostly informal and incidental learning (Foley 1999), at times self-directed, at other times taught in
informal apprenticeship with others. This is learning which occurs in casual interactions with neighbours and their gardens, parents and grandparents teaching children and each other, self-directed learning by individuals in researching seed and plant varieties, weed control, fertilizing, food recipes etc., and hands-on, experiential learning in constructing garden plots, preparing soil, caring for plants and experimentation with new varieties and techniques. Learning also clearly takes place in non-formal education – in garden and community-based workshops on topics such as carpentry, composting, organic gardening, water conservation, insect control and recycling, but also in areas such as sustainable food systems, green roofs, vertical farms, aquaponics and urban agriculture (Saldivar-Tanaka and Krasny 2004; City Farmer 2012). It may also include formal education in disciplines such as organic horticulture, landscape design and soil management (Gaia College 2012).

Community garden programs are at times developed explicitly to teach gardening skills and knowledge, for example, as part of employment training programs for youth and imprisoned people (Pudup 2008).

The experience of seeing where food comes from, of expanding an understanding of the immense variety of edible and flowering plant species available to eat, of learning how plants develop and grow and are eaten, may also be a revelation to community gardeners – an ‘environmental act’ which raises environmental consciousness towards a more eco-centric worldview (Mayer-Smith, Bartosh, and Peterat 2007). For those urban dwellers who have never tasted anything but the relatively limited varieties of shipppable, durable, shiny, yet flavourless vegetables and fruits available at our large corporate supermarkets – bland, hard tomatoes, blanched and frozen corn, packaged dry spices, etc. – community gardens may offer a first lesson in the surprisingly good taste of ‘real’, chemically clean, freshlypicked food. In some instances, this experience comes as a sensory and culinary epiphany, and may then lead to further examinations of diet, corporate food production, human health and the culture of eating and growing local food (Kingsolver 2007; Pollan 2008; Berry 2009). An intergenerational community garden at the University of British Columbia’s urban farm site in Vancouver, Canada, for example, brings together community elders, elementary students and their teachers to learn how to farm and eat vegetables, and in the process, to foster environmental knowledge and care for the planet (Landed Learning 2008). Through the experience of gardening in this community, participants not only learn new agricultural and ecological skills and knowledge, but also begin to shift from ‘seeing the environment as an object or a place, to a view characterized by the interconnectedness of humans and environment’ (Mayer-Smith, Bartosh, and Peterat 2007, 82).

In addition to helping develop an ecological consciousness, community gardens are also sites which foster health, psychological well-being, self-esteem, personal growth and social engagement (Van Hassell 2002; Hou, Johnson, and Lawson 2009). In humanistic terms, community gardens are understood as ‘therapeutic landscapes’ (similar to spas, religious shrines and healing gardens in healthcare facilities) which contribute to physical, emotional, mental and spiritual health (Wilson 2003; Okvat and Zautra 2011). This form of holistic, place-based healing has been particularly important in community garden initiatives involving First Nations communities where a strong connection to the land, traditional foods and lifeways is vital to healing, health, cultural celebration, decolonizing practices and self-identity (Mundel and Chapman 2010; Stroink, Nelson and McLaren 2010). Immigrants and newcomers to North American cities likewise often ‘plant’ and nurture their
identities in their gardens – in the design of their gardens, garden structures, plant species and social norms of garden relations. Puerto Rican community gardens in New York City, for example, often grow culturally distinct varieties of beans, potatoes, peppers and spices, have communal casitas (small houses for social gatherings), bateys (barbecue spaces) and santos (saint figurines) and use garden spaces to play cards, celebrate birthdays and holidays and play music (Saldivar-Tanaka and Krasny 2004). For some Chinese immigrants, especially older adults, gardens similarly provide a place to ‘regrow’ their identity in a new land and to foster a greater sense of continuity across space and culture (Li, Hodgetts, and Ho 2010).

In community gardens, individuals might learn not only about farming, food and culture, but also about science, ecology and environmental sustainability. In many ways, community gardens seem to function as a site of informal agricultural extension education, complete with demonstration plots, master farmers, apprenticeship, experimentation, educational workshops, readings, community lectures and organised site visits to other gardens. In research on community garden programs purposefully designed to promote intergenerational, non-formal environmental education, such as Garden Mosaics (Krasny and Tidball 2009) and Landed Learning (Mayer-Smith, Bartosh, and Peterat 2007), elders, farmers and master gardeners teach traditional ecological knowledge to youth, who also learn scientific knowledge of gardening, technical skills, an awareness of where food comes from and a sense of community stewardship. Similarly, in a study of community gardens in Seattle, Washington, DC, Hou, Johnson and Lawson (2009, 24–5, 163–4) found that gardens offered ecological knowledge about farming, food security, local place and urban sustainability practices:

The community garden becomes a place to illustrate new ideas about urban ecology and conservation … Quite often gardens include areas devoted to native plants, butterfly gardens, and drought-resistant plants. These areas serve as ‘demonstration sites’ intended to inspire and educate visitors …

… In the gardens, awareness of seasonal, hydrological, and nutrient cycles may be gained from the day-to-day experiences of gardening, interpretive events, and formalized classes and workshops. In the Seattle cases, the practices of organic gardening, recycling, composting; the application and demonstration of sustainable technology such as rainwater harvesting and solar and wind energy; and educational workshops and activities also provide opportunities for learning.

Collective learning in the community garden movement

As an urban social movement and a space for the creation of civil society, community gardens in the food movement are replete with opportunities for collective learning about food security, environmental sustainability, community resilience, social justice and cultural identity. In theoretical terms, community gardens function as a pedagogical site to support the lifeworld against the colonizing efforts of the system; they enact an ideological alternative to dominant common sense notions of industrial food systems, private property and urban real estate ‘development’. In some instances, they can revitalize communities in ‘blighted’ areas through the effort, knowledge and dedication of poor and marginalised people – people who are commonly portrayed as having little agency to act for their own improvement and for the collective good. In theoretical terms, community gardens can build
counter-publics which bring together and educate citizens across differences of race, class, gender and culture. They can be crucibles for community organising, democratic learning, conscientisation and social action.

Many of the early community gardens created in poor, under-resourced inner cities in the 1970s involved the takeover of abandoned, often garbage-strewn vacant lots (Van Hassell 2002; Lawson 2005). For example, the Lower East Side of New York City, infamous first, as the home to teeming immigrant tenements at the turn of the nineteenth century, then as an ‘urban wasteland’ in the 1970s, and of late as a trendy gentrifying neighbourhood, has also been the site of one of the most vibrant urban community garden movements in North America, peopled and led primarily by low income Latino and African-Americans (Van Hassell 2002; Eisenberg 2011). The movement includes an early history of land takeovers and the conversion of vacant lots and abandoned buildings to community gardens in the 1970s and 1980s, guerrilla gardening and community protests to protect gardens (often unsuccessfully) against developers’ bulldozers in the 1990s and nominal institutional recognition of garden land tenure rights by city government and planners in the early 2000s. As a ‘counter-public’ (Fraser 1990) these garden movement participants and activists helped to promote a critical consciousness, community action and popular education around urban land rights, community identity and food security. In what might be termed ‘educative-activism’ in environmental adult education (Clover 2002), community gardeners in New York City worked toward urban sustainability, promoted cultural and spiritual identity, and envisioned an alternative society (Van Hassell 2002).

More recently, even while community gardens often enjoy the blessing of ‘establishment’ urban planners and politicians, more radical initiatives such as guerrilla gardening (Reynolds 2008; Tracey 2007) and edible lawns (Haeg 2010) continue to creatively cross boundaries of convention and law. Earlier popular direct actions in the takeover of lands for gardens are also claimed as part of this legacy. Among these are the movement to create People’s Park in Berkeley, CA in 1969, the Yippies, urban land occupation and the establishment of Four Seasons Park in Vancouver, Canada in 1971 (a community protest garden to defend land slated for commercial development), and the Green Guerillas and their struggles to establish community gardens in New York City from 1973 to the present day (see www.greenguerillas.org). In theoretical terms, each of these instances of community activism challenges ‘common sense’, hegemonic notions of private and public property and the taken-for-granted ordering and regulation of urban space by the state and market.

The connection between collective learning and action in the creation of community gardens, and the construction and maintenance of democratic civil society appears to be a strong one. The social relationships formed in imagining change, making collective decisions and taking action to transform privatised urban land holdings into a shared community space clearly promotes ‘communicative interaction’ among citizens and strengthens civil society (Welton 2002). For disenfranchised groups who have traditionally had little voice as citizens and few opportunities to actively participate in North American society, the experience of creating, caring for and defending a community garden is often transformative (Levkoe 2006). Community gardens can be spaces where reciprocity, trust, and cooperation can be learned and practiced across social differences, where mechanisms for sharing resources and resolving conflicts can be collectively developed and tried
out, and democratic forms of leadership fostered in the common interest (Glover, Shinew, and Parry 2005; Okvat and Zautra 2011). Moreover, the social networks, knowledge and organising skills which members of a community garden gain at times comprise a collective capacity for participatory democracy which can then be passed forward to new members through community dialogue (Hou, Johnson, and Lawson 2009).

While community gardens might serve as flourishing learning sites for participatory liberal democracy, they can also have a more radical role in promoting decolonisation, cultural identity, environmental justice and antiracist education (Saldivar-Tanaka and Krasny 2004; Shinew, Glover, and Parry 2004; Levkoe 2006; Mundel and Chapman 2010). As cultural landscapes reclaiming indigenous lands, crops, sense of place and community, community gardens play a strong role in decolonisation for native American and First Nations peoples. They have in many cases helped native peoples to unlearn and overcome food dependency on outsiders, undo the damage of ‘Western’, imported foods on the health of native peoples, and heal the land (LaDuke 2005; Honor the Earth 2010). That is, community gardens can promote the restoration of local food economies and food sovereignty for native peoples, encourage a revival of healthier traditional foods and diet and reinvigorate numerous complex and ecologically sustainable indigenous agricultural practices and systems. They also allow native gardeners to reconnect with the earth and plants, to revive cultural teachings for health and healing, and to reinforce a holistic sense of identity and being with the land. In an urban aboriginal community garden project on traditional Musqueam territory in Vancouver, Canada, for example, First Nation peoples who have suffered a history of colonial residential schooling, systemic racism and the disinheritance of culture, place and food, come to a community garden to learn to grow, harvest and prepare traditional foods, to share meals, to heal both physically and spiritually, and to find sustenance and collective identity as a community (Mundel and Chapman 2010).

Community gardens can also act as sites of multicultural learning for marginalised immigrant peoples, as well as places where interracial cooperation, environmental justice and anti-racist education is enacted. The cultural identities and traditions of local neighbourhoods are often reflected in the plants grown, agricultural practices, design and decoration of the garden, buildings and social norms. As noted above, for example, community gardens in predominantly Puerto Rican neighbourhoods in New York City grow familiar Puerto Rican crops and have traditional structures such as casitas (Saldivar-Tanaka and Krasny 2004). Likewise, foods and architectural elements in mostly East Asian community gardens in Seattle express and reinforce particular Asian cultural identities, and may also teach these to others (Hou, Johnson, and Lawson 2009). Euro-American gardeners similarly have particular cultural norms for foods, and for the design and management of community gardens in their neighbourhoods. In some community gardens, the opportunity for cross-cultural learning and education appears to be particularly rich. In St. Louis, Missouri, for example, white and African-American gardeners understand certain community gardens as places where racially diverse neighbours, who would not normally socialize together, work together, learn together and grow to respect one another (Shinew, Glover, and Parry 2004).

Taking a step further, Growing Power, a much celebrated community-based urban farm and education centre in an impoverished African-American neighbourhood of Milwaukee, Wisconsin, has an explicit focus on promoting social justice.
and anti-racism (Walter forthcoming). Growing Power hopes to ‘inspire communities to build sustainable food systems that are equitable and ecologically sound; creating a just world, one food-secure community at a time.’ It does this by promoting equal access to healthy, high-quality, safe and affordable food … (in) hands-on training, outreach and technical assistance through the development of Community Food Systems that help people grow, process, market and distribute food in a sustainable manner. (Growing Power 2012, 4)

Most recently, Growing Power has organised ‘Growing food and justice for all (GFJI)’, an anti-racism leadership training and networking initiative, explicitly aimed at dismantling racism and empowering low-income and communities of color through sustainable and local agriculture … to bring about new, healthy and sustainable food systems and supporting and building multicultural leadership in impoverished communities throughout the world. (Growing Food and Justice for All (GFJI) 2012)

To date, GFJI has organised four national gatherings in Milwaukee, bringing together community gardening activists to participate in facilitation workshops for ‘multicultural leadership capacity building using anti-racism principles’, skills building, dialogue, community action, networking, arts-based activities and the sharing of locally-grown food (Ibid.). In this initiative, there is a strong connection made between anti-racism education, environmental justice, community food security and learning and education in the food movement.

Conclusion
Adult learning in the community garden movement, both individual and collective, clearly takes a wide range of informal and non-formal modes. To date, there is little if any empirical research on learning in community gardens, but from the more general literature, it is clear that much of this learning is informal, experiential and hands-on, and that teaching demonstrations, exchange of information and knowledge among gardeners, and self-directed learning likely play a large educational role. Informal ‘learning networks’ of gardeners in civil society, as part of the food movement, can be found not only in community gardens themselves, but at farmer’s markets, in bookstores, coffeehouses, greenhouses and community centres, in non-formal adult education programs, at community meals, and through community organizations. There appears to be a vibrant civil society network of self-directed gardeners learning from each other on the internet as well – exchanging gardening tips and information, design strategies, garden and protest stories, political acumen, knowledge of alternative energy, sustainability and community-based urban planning. Websites and blogs such as City Farmer (www.cityfarmer.org), Guerrilla Gardening (www.guerrillagardening.org) and Growing Power (growingpower.org) are important knowledge and learning nodes, and help to weave the gardening community together and strengthen its connections to the larger food movement.

From this review of literature, it appears that learning in community gardens is not only cognitive, but also emotional, spiritual, sensory and physical. Moreover, it seems that such learning can be collective, constructivist, synergistic and transformative for some. Gardening clearly evokes strong positive emotions towards plants,
land and food – reverence, love, excitement, enthusiasm, exultation and so on. In community gardening, bodies are also exercised, pained and relaxed, in concert with other bodies. There is often a shared experience of collective labour and hard-earned tenure rights to land tilled, of self- and group identity cultivated in the soil, plants, people and place. That is, participation in community garden initiatives resonates for many participants as a cultural code of collective identity within the food movement; community gardens are cultural sites in their foods and design, in their ceremonies, rituals and shared beliefs about plants. They are a source not only of food, but also of health and empowerment to some as well. Meals grown and prepared by hand, and shared socially across differences of class and race, or together within homogenous groups, build feelings of solidarity and common humanity (Flammang 2009); they are a familiar, yet profound experience, clearly rich in learning.

Community gardens can also be understood as a site of informal learning in public pedagogy. In the past, these gardens helped to reproduce dominant state ideologies – in the assimilation of immigrants, production of industrial workers, and creation of patriotic citizens – but since the early 1970s, they have often been the site of contestations of state and corporate power. This has occurred not only in struggles over land, but as a vibrant part of collective cultural identity in an alternative food movement which challenges the extant system of industrial food production, distribution and consumption. There is evidence in some community gardens of ‘learning in the struggle’ for social change (Foley 1999); of what has also been termed ‘concientización’ and ‘educative-activism’ in environmental education (Clover 2002). This is apparent in local community garden struggles to reclaim and revive vacant lots and neighbourhoods in New York City, in guerrilla gardening across North America, and in food security, social justice and anti-racism initiatives such as Milwaukee’s Growing Power.

Common methodologies used in research on social movement learning which might be applied to the study of community gardens include participatory action research (Hall and Turay 2006; Chovanec and González 2009), feminist research methodologies (Butterwick and Selman 2003; Gouin 2009), participant observation (Levkoe 2006), interpretive case study research (Duguid, Mündel, and Schugurensky 2007), and oral history and other historical research methodologies (Van Hassell 2002; Walter 2007a, 2007b). The field of Environmental Education is not a complete stranger to these research methodologies either (Krasny and Doyle 2002; Doyle and Krasny 2003; Robottom and Sauvé 2003; Sauvé 2005), nor to a consideration of environmental education, ‘transformative knowledge creation’ and social change (Lotz-Sisitka 2004). Research methodologies in Environmental Education used to study the latter include ‘case study work aimed at exploring contexts of practice; action research to contribute to processes of social and educational change; historical and social process analyses; and phenomenological and critical realist probings of the relational dimensions of environmental education praxis (Ibid., 292). As Lotz-Sisitka (Ibid., italics in original) argues, these methodologies ‘all illuminate environmental education research as processes of, rather than a means to, social change, i.e. research as processes of social change’. Thus, from a social movement learning perspective, research on adult learning in community gardens can itself comprise a part of the food movement. That is, knowledge generated through this type of environmental education research does not need to be extracted from its pedagogical site, but can contribute, both on-site and off-site, to learning for socio-environmental change.
In educational terms, research which documents and helps us to better understand such adult learning might then inform and encourage the many extant community garden initiatives as environmental education, at once individual and collective, local and in larger networks, within the food movement and beyond.

Notes on contributor
Pierre Walter is associate professor in the Adult Learning and Education (ALE) Graduate Program at the University of British Columbia. His research focuses on adult learning in social movements, adult environmental education, gender and development and community-based ecotourism in Asia.

References


