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Chapter 18

School gardens and the school food plan: contributing to a culture of healthy living

Abigail Page, Myles Bremner and Rowena Passy

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Chapter objectives:

- An awareness of how school gardens can contribute to the school learning culture.
- An understanding of changes in government policy towards eating and healthy living.
- An understanding of the links between school gardens, food and health.

[box end]

Introduction

There is a growing body of international research that demonstrates an increase in sedentary lifestyles prompted by a number of factors that include a growth in urbanisation, changing

modes of transport, changing work patterns, the attraction of screen-based entertainment and fear of strangers (Charles and Louv, 2009; Moss, 2012; WHO, 2015). These indoor-based lifestyles, together with an increase in readily-available energy-dense foods, have contributed to a doubling of worldwide obesity since 1980; 42 million children under the age of five were considered to be overweight or obese in 2013, which puts them at a significant risk of developing cardio-vascular disease and/or diabetes (WHO, 2015). In the UK over a fifth of 4–5 year olds (23 per cent) and a third of 10–11 year olds (34 per cent) are currently overweight or obese (Public Health England, 2015), and poor diet is contributing to other health concerns such as tooth decay (Faculty of Public Health, 2005). At the same time, there is a wider understanding that school-aged children can suffer from emotional and well-being issues; evidence from England shows that around one in ten children and young people aged between five and sixteen suffer from a diagnosable mental health disorder, and that around 80,000 children and young people suffer from severe depression (YoungMinds, 2015).

There is equally a body of research which demonstrates the physical and emotional benefits derived from spending time in the natural environment. Children and adults tend to be more physically active when they are outside, while green areas can have a calming and relaxing effect on those who are experiencing emotional stress (e.g. Charles and Senauer, 2012; Faculty of Public Health/Natural England, 2010; Gill, 2014). In addition there can be environmental benefits arising from children spending time outside, as they can learn to appreciate the natural world with regular contact; Louv (2008), for instance, argues that children need to experience nature in order to build a relationship with their local environment and that this, in turn, helps them to understand and care for it over the longer term. Feeling a connection with local places can have the effect of raising awareness about the wider global environment which, in turn, is likely to encourage young people to respond

carefully and thoughtfully to issues that relate to its sustainability (Dillon and Stevenson, 2010; Gill, 2014; Wattchow and Brown, 2011).

Partly in response to these issues, there is a renewed international interest in school gardens, seen for example in the USA's Edible Schoolyard (<http://edibleschoolyard.org/>), Australia's Stephanie Alexander Kitchen Garden Program (Block et al., 2012) and the UK's Royal Horticultural Society's Campaign for School Gardening (<https://schoolgardening.rhs.org.uk/home>). There is also a growing recognition at school level that teaching outdoors can provide children with a range of learning opportunities that complement and enhance those experienced indoors (e.g. Blair, 2009; Dillon and Dickie, 2012; Gilchrist et al., 2016; Ozer, 2007). It is in this context that school gardens, through their capacity to encourage children and young people to engage in practical, sometimes unfamiliar tasks, can make a significant contribution to curricular learning while conveying important messages around health and well-being. More broadly, school gardens can contribute in a positive way to the school learning culture. In the first section of this chapter we examine how this may be so, providing an example of how the school garden can encourage a rich culture of learning. In the second section we narrow our focus to discuss how school gardens can support the English policy directives aimed at developing children's awareness of healthy living.

School gardens, learning and school culture

Culture can be a difficult term to define, largely because it is where institutional power relations meet personal beliefs and behaviours, with different 'layers' of people within each institution experiencing the culture in different ways. Daly (2008) reported that there were 156 definitions of 'culture' by 1952, and it is possible that more have been devised since

then. In this chapter, however, we draw on Glover and Coleman's definition of school culture as:

... the integration of environmental, organisational and experiential features of school existence to offer a context for teaching and learning and its subsequent improvement. (Glover and Coleman, 2005: 266)

The dynamism implicit in this definition reflects the continuously shifting policy framework for schools together with changes in staff and pupils; teachers move to new jobs, children grow up and leave school, headteachers change. 'Improving the context for teaching and learning' is framed by the national context but thereafter may be interpreted in a variety of ways around headteacher and staff values and priorities; is the focus, for example, purely on improving the cognitive outcomes of examination results, or are teachers and pupils encouraged to participate in broader types of learning? What would be the purposes of these different learning experiences? Answers to these types of question (however provisional) are expressed in school organisation, how school community members relate to each other, and the physical surroundings in which they experience these relationships; the whole makes up the school culture. The role of the garden can be an important part of this, depending on staff attitudes towards learning outside, their views on its potential benefits and the priorities attached to its maintenance and development (Passy, 2014). To put it another way, different schools will have different levels of cultural density – 'the nature, thickness and dominance of the habitus and norms of practice' (Waite, 2013: 5) – around the use and promotion of a school garden as part of pupils' learning process. In practical terms, this means that some schools may have a small vegetable garden that is used purely for after-school clubs, while others may expand this activity to grow food for the school kitchen and to keep different animals. Gardens may be used for different curricular subjects such as science, mathematics and literacy (Williams and Scott Dixon, 2013), for growing food (Page, 2012), as a focus for

community involvement and/or pastoral care (Passy et al., 2010), or for all these reasons and more; all have different aims and results that contribute to and influence the school's learning culture.

In the case study example below, we can see how one school has integrated the garden into everyday life so that its influence, in the words of the headteacher, is 'like a plate of spaghetti. And all those bits tangle up together but they make a very good spaghetti'.

[box start]

Case study 18.1: The school garden's role in promoting a 'culture of nurture'

The garden is an important part of encouraging a '*culture of nurture*' in one small rural primary school in the West Country. It began with a visit from a member of a school gardening scheme, who convinced the headteacher that gardening would be a good idea and then helped staff and pupils set up some beds for growing vegetables. Gradually interest in growing developed among staff and pupils, and the school set up links with a local organic farm for a 'Young Farmers' Club to grow more vegetables, joined the Food For Life Partnership (FFLP) and became a FFLP flagship school. As part of the conditions for this award, the school established a group of staff, pupils and community members which, supported by Garden Organic (one of FFLP's partners), decided on what they would grow and how they would cook the garden produce in the newly-expanded kitchen facilities.

It was at this point that gardening activities began to expand in earnest, with the garden lead regularly integrating gardening activities into curricular learning for all Key Stage 2 (aged 8–11) pupils, exploring new ideas and encouraging children to take part in a number of sponsored schemes such as the RSPB Bird Watch and Kew Garden Treasure Chest initiative.

At the same time, the headteacher noticed a garden design competition, the first prize for which was to have the proposed garden built in the school grounds. Staff, pupils and members of the local community contributed to the proposal which won the competition and brought all the Key Stage 2 pupils the opportunity first, to help build the garden at the local county show where it was to be exhibited, and then to attend the show itself – a new experience for many of the children. And the renewed growing areas in the school grounds led to success in another competition; plants grown in the school were selected for exhibition at Chelsea Flower Show, taken to London by pupils in a wicker basket that they made themselves!

Yet winning competitions is not the point. Matt, the headteacher, explained how growing plants and food were important parts of a nurturing environment that encourages children to grow in confidence, explore new opportunities, and understand that gardening does not always go to plan, for crops can fail. He said that:

everybody in the school has the right to be somebody special. [Furthermore,] all the gardening stuff is deeply at the root of that [because it concerns pupils] nurturing, looking after themselves, looking after each other; growing. Growing means developing, developing means learning. It means stretching yourself, helping to stretch those around you – it means that you can do all sorts if you actually get off your bum and try!

Lunchtime rituals, that include sitting down together and eating organic school dinners with proper cutlery and plates, help to reinforce these messages of nurture, cohesion and, through trying new foods, exploration. And the school's incremental gardening successes illustrate how such messages can have a powerful effect: as Matt commented, 'the more that children realise they can do something, the more they're likely to be able to do it ... and so, if they can do that, what else can they do?'

[box end]

The headteacher's emphasis on the collective experience of learning suggests that he approaches learning from a sociocultural perspective. There is more than one sociocultural theory (e.g. Jarvis and Parker, 2009) but they have in common the idea that the relationship between social action and individual thinking underpins cognitive development; learning and knowledge are not just dependent on individual efforts and talents but are also the outcomes of different forms of social interaction such as spoken and written language, relationships and institutions (Mercer and Howe, 2012: 12). Theorists of place-based education might add the importance of the physical environment in which these social interactions take place; a vegetable garden, a river and open moorland, for example, would be very different settings in which to learn. In the case-study example above, we can see that the headteacher encourages the ideas of growing, mutual support, exploration, and that the garden is both a metaphor and a practical site for putting these ideas into action. His remark that children have 'the right to be special' suggests that different abilities can be '*nurtured*' through the different types of learning available through the experiences of growing; as he commented, an important part of the gardening experience is 'the confidence that you get from growing that bean into a plant and looking at its roots going down into the jam jar and then the foliage growing up. And you realise, "I can do that!"'. It is this confidence, with the support and encouragement of those around them and through the medium of the garden, that enables pupils to 'get off their bum and try' new ideas and adventures.

If we return to the idea of cultural density, this school would seem to have a learning culture in which 'the acquisition of knowledge ... is rich in illustration and experience' (Becker, 2014: 186), and in which the garden plays an important role. As Waite suggests, schools are 'thick with established norms and ways of behaving' (2013: 418); this example

demonstrates powerful messages of inclusion, cohesion, resilience and exploration within and around the different gardening activities for, as the headteacher suggests, the garden is ‘tangled up’ in school life to the extent that it would be difficult to separate its different components. It is equally possible that some pupils have no interest in the garden, and that their school experience might be very different to that, say, of the children who travelled to Chelsea Flower Show, but the nurturing and exploration that underpin the school culture and that are visible in the school garden would nonetheless be the common factor of their experience. It is worth noting at this point that the headteacher’s active encouragement of the garden, together with the entrepreneurial garden lead, can be seen as key factors in developing the density of the ‘garden culture’, and that this is open to change when they leave; research shows that senior level support is one of the essential factors in establishing and maintaining a school garden, together with allowing school staff the time and resources to undertake the necessary work (Page, 2012; Passy et al., 2010). We revisit these issues in the final section of the chapter.

[box start]

Thoughts on theory

- We have speculated that the head teacher in this example draws on a sociocultural perspective – what other theories could be considered when using the garden as a learning space? What is the theory of learning that underpins your use of the garden?
- Looking back to the chapters that focus on different curriculum areas, how can the garden support and/or enhance these types of learning? How would they link to your theory of learning?
- What kind of learning culture would you like to encourage in the garden?

[box end]

[box start]

Points for practice

- Use the ‘purpose, place and people’ approach to think about the different types of garden that could be developed within your school grounds. These may include a wildlife habitat, vegetable garden, raised beds, sensory garden or willow classroom. What types of learning might be supported by these different places?
- Include children in the planning process, as they often have excellent ideas!
- Ask for help from staff, parents and school volunteers; people have a surprising range of skills and expertise, and are often willing to share them.

[box end]

The government, healthy living and school gardens

In this section, we narrow the focus of the chapter to think about how the school garden can encourage an awareness of healthy living, including knowledge of food and healthy eating. Although this is arguably an aim for many school gardens, it has recently been brought into sharp relief by a number of relevant new policy developments in England: the introduction of universal infant free school meals in September 2014 for children aged 4–7; compulsory food education and practical cookery lessons for all pupils up to Year 9 (aged 13–14) in September 2014; a new set of mandatory school food standards in most schools (some academies are exempt) in January 2015; and a new schools’ Ofsted Common Inspection Framework in September 2015. The latter document includes a new demand that schools are inspected on how children and learners ‘keep themselves healthy, both emotionally and physically, including through exercising and healthy eating’ (Ofsted, 2015: 14). In a letter to MP Sharon Hodgson, the National Director of Schools describes how Ofsted (the school inspection agency) inspectors will:

... look for evidence of a culture or ethos of exercise and healthy eating throughout their entire inspection visit, in classrooms as well as in the school canteen. They will look at the food on offer and visit the canteen to see the atmosphere and culture in the dining space and the effect this has on pupils' behaviour. Inspectors will also speak to school leaders about how they help to ensure a healthy lifestyle for pupils by helping them gain knowledge of a good diet, physical exercise and mental and physical wellbeing. (Harford, 2015)

This emphasis on school food is not something new to the political arena, and Gustafsson (2002: 685) argues that school meals policy is 'emblematic of far broader central government preoccupations'. Thus concern over the quality of recruits for the Boer war prompted the foundation of a school meals service for malnourished children in 1907; belief in a universal welfare state stimulated the statutory duty for local education authorities to provide a meal for all school pupils after the Second World War; confidence in the concepts of choice and competition were evident when the school meal service was deregulated in the 1980s; launching consultation over new nutritional standards for school meals in 1998 involved greater numbers in the process of policy-making at a time of decreasing election participation rates (Gustafsson, 2002). In the current case a clear shift of emphasis towards improving children's physical and mental health, and the critical role of food in the process of supporting young people's healthy development, can arguably be seen as the result of a configuration of a number of factors.

The first was the long-term, high-profile lobbying of individuals, such as the chef Jamie Oliver, and organisations, such as the Children's Food Trust, the Food for Life Partnership, Garden Organic and School Food Matters, who campaigned for improvement in the quality of school food as part of developing a lifestyle that was both healthy and sustainable. This coincided with mounting evidence that demonstrated the long-term effects of a poor diet, linked to the idea that children tend to form their eating habits at a relatively early age. In

addition, a new body of research was beginning to suggest that nourishing school food could help improve children's behaviour and attainment (e.g. Orme et al., 2011; Teeman et al., 2011; see also Public Health England, 2014). This, together with anecdotal and research evidence (e.g. Ofsted, 2008; Passy et al., 2010) that schools were increasingly interested in taking children outside to learn, prompted the charity Sustain to write to the Departments of Education, of Health, and for the Environment, Food and Rural Affairs to suggest that a taskforce should be set up to make recommendations on how schools could promote practical food education to support healthy living, healthy eating and children's attainment. The resulting Food Growing in School Taskforce Report (FGiSTR) demonstrated the benefits of growing food in schools, and had the vision that:

Every child and young person has experience of food growing that has a positive impact on their learning, well-being and understanding of the natural environment. Schools and their extended communities are enriched through food growing. Our population, economy and society benefit from learning and behaviours acquired through food growing in schools. (Page, 2012: 57)

At the same time, responding to concerns about the quality and take-up of school meal provision, the then Secretary of State for Education, Michael Gove, commissioned Henry Dimbleby and John Vincent to develop recommendations for a School Food Plan (SFP). Their remit was to address four questions:

How do we get our children eating well in school?

What needs to be done to make tasty, nutritious food available to all school children?

How do we excite children about food so that they want to eat it?

What role should cooking and food play more broadly in schools, to enrich children's home lives and leave a legacy for later life? (Dimbleby and Vincent, 2013:16)

With the FGiSTR recommendations feeding in to their research and consultation, the SFP authors reported that, although some schools were doing a 'brilliant job of weaving food education ... into school life and the curriculum' (ibid.: 7), others were not. In making the case for increased take-up of school lunches, they argued that:

- Only one percent of packed lunches meet the nutritional standards applied to school food, making school food the healthier option.
- Encouraging greater take-up of school lunches (at the time of the report, it was around 43 per cent in England) means that more money goes into the system, enabling the quality of the food to go up and the price of lunches to come down.
- Schools need to create a 'great food culture' that involves, among other things, cooking food that is both appetising and nutritious, and getting pupils interested in cooking and growing (ibid.: 7–19).

The SFP's vision of a 'great food culture' incorporates a whole-school approach to food, in which headteachers, school staff, children, governors and parents collaborate in growing food, cooking it, and understanding the links between food and healthy living (p. 25). It has an extensive website and supports schools in developing their own food culture by providing information, advice and guidance for all staff involved in the different aspects of school food (<http://www.schoolfoodplan.com/>). And it is in relation to the whole-school approach to food that school gardens can play a central role; the FGiSTR argues that food growing in schools can often be the catalyst for a range of other developments that include creating a vision and ethos for the school, staff development, curricular learning for pupils and engaging families and the wider community. The following case study, from a primary school in London, illustrates how a whole-school approach can link food growing to health and well-being.

[box start]

Case study 18.2: Linking food growing with health and well-being

In a primary school in Hackney, London, food growing is used to promote the physical, social and emotional health of pupils and their families. The school has a high proportion of children from families on a low income, three-quarters of pupils speak English as an additional language, and two-thirds of pupils are entitled to free school meals. The school has dedicated spaces for growing food including raised beds, polytunnels and fruit trees. Pupils also take home plants to grow on their windowsills, balconies or in gardens, giving them the opportunity to continue learning about food growing, and to harvest and eat their home grown produce outside school.

Being active

Every child in the school has a minimum of two lessons a term focused on food growing, and teachers use the school garden to teach the national and wider school curriculum. The garden is accessible throughout the school day, and hosts a range of other activities such as an after school club, family picnics and Forest Schools. The children love being out in the fresh air, and many spend as much time as they can in the garden, exercising as they get stuck in to different tasks. There is a good level of parental involvement too, with 30–40 parents joining in with the gardening workshops.

Mental health and well-being

The school employs two members of staff trained in horticulture and therapeutic skills to work with children and their families in dedicated sessions throughout the school day. Through this pupils and their families are encouraged to talk, work as part of a team, share, resolve conflicts and engage in a positive experience. Parents who have been involved in

these activities say that the experience has been positive for them, helping them to feel better about themselves and, for some, to manage mental health problems. Alison, one of the session leaders, says, ‘There is a uniqueness to the way this school uses the garden to promote a sense of health and well-being amongst pupils and families, encouraging outdoor play, learning and conversation in an informal and practical way.’

Eating well

Lunchtime is seen by the school as an occasion for social interaction and for helping children to develop a positive attitude to eating healthily. Consequently take-up of school meals is strongly encouraged, and this is aided by the provision of high quality meals which are prepared on site by the school kitchen staff using all fresh ingredients. In particular, produce grown in the garden is used, ensuring that everyone who wants to can try something from the garden. Children, teachers and parents all report that the children are excited about eating the produce they have grown and due to this and the good food environment are willing to try foods that might be unfamiliar to them. Fruit, vegetables and herbs are used in cooking sessions and for making products like chutney for the school fayre, and children are able to take produce home for their parents to use to cook healthy meals.

The school garden provides a space and is used extensively to promote health and well-being for children and the extended school community through the combination of formal and informal use of the garden, healthy eating discourse supported by practical use of school-grown ingredients, and thoughtful engagement of parents in growing activities on and off site. It is through this whole-school approach, including children’s families, that this school is developing and sustaining positive health and well-being values, norms and behaviours.

[box end]

This school is another example of one with thick and inclusive garden cultural density; it has a very clear focus on children's health and well-being, and includes support for local families. It provides an example of how, in addition to positive academic outcomes, school gardens offer a 'structure of positive impacts on many different levels for students' (Williams and Scott Dixon, 2013: 225). The contribution of the school garden to achieving these impacts for students can perhaps be explained by theories of behaviour change, particularly those of behavioural economics, which are used in public policy in the UK, Europe and the US (Oliver, 2013).

Behavioural economists argue that two sorts of mental process shape our behaviour and the choices we make, described as *System 1* and *System 2* thinking. System 1 thinking 'operates automatically and quickly with little or no effort and no sense of voluntary control', whilst System 2 thinking is the rational or reflective thinking which 'allocates attention to the effortful mental activities that demand it' (Kahneman, 2011: 20–21). It is the interaction between these two systems that determines our behaviour. Thus what we consider to be active choices taken using System 2 thinking, for example about what food to eat, are strongly influenced by the uncontrolled and unconscious processes of System 1 thinking. It has been shown that System 1 thinking makes use of heuristics (rules of thumb) and is subject to a number of biases (Kahneman, 2011) which impact on the choices we make. For example we tend to have a demonstrable bias towards the present, where immediate gratification takes precedence over consideration for the future (Rabin, 2013).

Thaler and Sunstein (2008) set out in their influential book on nudge theory how understanding these sources of bias may help improve the way that choices are framed. This

is called ‘choice architecture’ (ibid.: 89) and so support individuals to make choices that maximise their well-being.

There is psychological evidence that small, sometimes seemingly irrelevant, cues can affect individuals’ behaviour; that it is possible to ‘prime’ people to behave in particular ways by exposing them to words, images and/or actions that would make it more likely for them to bring certain things to mind (Kahneman, 2011: 52). This may offer some explanation for why children involved in food growing activities in school show increased willingness to try new fruit and vegetables (Passy et al., 2010). When faced with food choices, the exposure to fruit and vegetables through gardening in school makes it easier for children to bring these foods to mind. Familiarity with these foods makes children cognitively comfortable with them and the next step to consumption is a small one.

Thaler and Sunstein also demonstrate that social pressures have a strong impact on individuals’ behaviour. In part this is due to what they describe as the ‘spotlight effect’ (2008: 65), where individuals perceive that others are watching their action closely, when actually this is unlikely to be the case. As a consequence individuals seek to conform to what they believe the group norms to be. Healthy eating behaviours can therefore be encouraged through stating and reinforcing healthy eating norms throughout the school. This echoes evaluations of food growing in schools programmes (e.g. Barratt Hacking et al., 2011), which have found that schools that plan food and food growing across the formal, informal and hidden curricula are better able to provide coherent experiences for children which reinforce healthy eating messages. Thus they suggest that in such a school we might expect to see food and food growing as curriculum components, especially science and food technology. Planned activities that take place outside of lessons – the informal curriculum – would include activities such as gardening clubs, growing and cooking at home or Forest School.

Food, and food growing would also be an integral part of the hidden curriculum – the norms and values communicated through the school culture – which could include the quality of dining experience, the care taken of the physical environment discussion in assemblies, and the content of displays (Barratt Hacking et al., 2011: 25). These psychological explanations of conformity coincide with the concept of cultural density and how this can support or obstruct certain desired ways of behaving (Waite, 2016).

[box start]

Thoughts on theory

- In what ways does your school use the school garden and food growing across the formal, informal and hidden curricula to support healthy eating messages?
- In what ways does being in the garden affect/influence children's learning about food?
- How can you use your school garden to change the 'choice architecture' in a way that supports healthy eating behaviours?

[box end]

[box start]

Points for practice

- Fruit and vegetables do not have to be grown in a garden – you can use pots, growbags and buckets on hard-standing areas if your school does not have space for a garden!
- Relate food growing in the garden to food provided in school; this can be done both through eating the food and the conversations around mealtimes.
- There are many resources and organisations supporting food growing that understand the link between growing food and healthy eating in schools. Make use

of the support provided by Garden Organic, the School Food Plan, the RHS and others.

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Chapter summary

The FGiSTR found that around 80 per cent of schools in England are involved in growing food at some level, but that a relatively small proportion of staff can be involved (Page, 2012). Developing and maintaining a garden can seem a daunting task to those without experience! It need not be, however, for there are many organisations offering skills and resources to support school gardening at all levels, and it is possible to find different grant-giving schemes; support can also come from less expected places, such as school catering companies. It is also possible to start with a small patch or a few tubs, and still have a big impact on learning and health outcomes. The critically important factor to a successful school garden is the wholehearted support from the leadership team, as it is difficult to integrate the garden across different areas of school life without this foundation. Policy support is also helpful and the current combination of Ofsted inspection measures should help to persuade school leaders of the value of school gardens, while primary schools' duty to provide universal infant free school meals can provide a catalyst for developing the 'good school food culture' recommended by the SFP. In addition, the new national curriculum (introduced from 2014) offers greater potential to include learning outside the classroom into everyday curricular teaching; as we have seen, the garden can be an exciting arena for a range of different types of learning. (See the many resources available on the Countryside Classroom – <http://www.countrysideclassroom.org.uk/resources/library> – and Royal Horticultural Society – <https://schoolgardening.rhs.org.uk/home> – websites).

It is fair to say that the political ground of education is always shifting, and this is certainly the case for school gardens and food education. Nevertheless the growing body of evidence regarding the benefits of food growing for learning, and for encouraging healthy and pro-environmental behaviours, means that school gardens will have a direct relevance to contemporary education for the foreseeable future.

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Further reading

Page, A. (2012) *Food Growing in Schools Taskforce Report, March 2012*, <http://www.foodshare.org.uk/wp-content/uploads/2012/03/FGIS-Main-Report-March-2012.pdf>. This report provides an overview of evidence on the benefits of food growing in schools, provides illustrative case studies and makes recommendations about ways to include all members of the school community in the process.

Williams, D.R. and Scott Dixon, P.S. (2013) Impact of garden-based learning on academic outcomes in schools: synthesis of research between 1990 and 2010. *Review of Educational Research*, 83(2): 211–35. This text provides a research review of the impact of garden-based learning on academic outcomes in schools. It shows direct positive academic outcomes in science, maths and language arts, and other positive outcomes of children and young people's social and emotional development.

Video links

Linking growing with health, school meals and the curriculum, Durham County Council: <http://whatworkswell.schoolfoodplan.com/articles/category/15/encouraging-children-to-try-new-foods>

Big Barn crop for the shop, Woodstock Primary School:

<http://whatworkswell.schoolfoodplan.com/articles/category/32/growing-fruit-and-vegetables>

Creating an incredible food culture, Carshalton Boys Sports College:

<http://whatworkswell.schoolfoodplan.com/articles/category/32/growing-fruit-and-vegetables>

Inspiring children to grow, cook and taste food, Bath and North-East Somerset:

<http://whatworkswell.schoolfoodplan.com/articles/category/34/learning-about-where-food-comes-from>

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Useful websites

Food for Life: This initiative brings schools and their surrounding communities together around the core ethos of healthy, tasty and sustainable food. The programme considers where food comes from and how it's grown, cooked and experienced. The initiative provides practical advice and support, and rewards and celebrates success:
<http://www.foodforlife.org.uk/>

Garden Organic: The Garden Organic education programmes help teachers and school professionals to develop organic gardening projects that teach children where their food comes from, develops their scientific and environmental awareness and encourages them to eat more fruit and vegetables: <http://www.gardenorganic.org.uk/education>

Royal Horticultural Society Campaign for School Gardening: This campaign teaches children the life skills of gardening, growing food, healthy eating and how to care for the environment: <https://schoolgardening.rhs.org.uk/home>

School Food Plan: This site has a range of resources for the development of a ‘great food culture’ in schools, including the plan itself, a checklist for head teachers, case studies and national news items relating to school food: <http://www.schoolfoodplan.com/>

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Want to learn more about this chapter? Visit the companion website at <https://study.sagepub.com.waite2e> for access to free SAGE journal articles, weblinks, annotated further readings and video.

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References

Barratt Hacking, E., Scott, W. & Lee, W. (2011) *Food for Life Partnership Evaluation (FFLP) monitoring the impact of the growing skills programme*. Available at <http://www.foodforlife.org.uk/~media/files/evaluation%20reports/cree---growing-your-future.pdf> (accessed 19.11.2015).

Becker, P. (2014) City and Nature – Cultural, anthropological and pedagogical aspects of a delicate relationship, in *Urban nature: inclusive learning through youth work and schools work*, Stockholm: Recito Förlag.

Blair, D. (2009) The child in the garden: An evaluative review of the benefits of school gardening, *Journal of Environmental Education*, 40(2): 15–38.

Block, K., Gibbs, L., Staiger, P., Gold, L., Johnson, B., Macfarlane, S., Long, C. & Townsend, M. (2012) *Growing Community: the impact of the Stephanie Alexander Kitchen*

Garden Program on the Social and Learning Environment in Primary Schools, *Health, Education and Behaviour*, 39 (4): 419-432.

Charles, C. & Senauer, A. (2012) *Health Benefits to children from contact with the outdoors and nature*. Children and Nature Network Report. Available at:

<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/eecd/nature-based-learning/Research/health-benefits-from-outdoor.pdf> (accessed 19.11.2015).

Charles, C. & Louv, R. (2009) *Children's Nature Deficit: What We Know – and Don't Know*.

Children and Nature Network Report. Available at: <https://www.childrenandnature.org/wp-content/uploads/2015/04/CNNEvidenceoftheDeficit.pdf> (accessed 19.11.2015).

Daly, T. (2008) School culture and values-related change: Towards a critically pragmatic conceptualisation. *Irish Educational Studies* 27(1): 5–27.

Dillon, J. & Dickie, I. (2012) *Learning in the Natural Environment: Review of social and economic benefits and barriers*. Natural England Commissioned Reports, Number 092.

Dillon, J. & Stevenson, R. (2010) *Engaging Environmental Education: Learning, Culture and Agency*. Rotterdam: Sense.

Dimbleby, H. & Vincent, J. (2013) *The School Food Plan*, Available at:

http://www.schoolfoodplan.com/wp-content/uploads/2013/07/School_Food_Plan_2013.pdf (accessed 19.11.2015).

Faculty of Public Health (2005) *Food Poverty And Health: Briefing Statement*. Available at:
http://www.fph.org.uk/uploads/bs_food_poverty.pdf (accessed 19.11.2015).

Faculty of Public Health / Natural England (2010) *Great Outdoors: How Our Natural Health Service Uses Green Space To Improve Wellbeing. An action report*. Available at:
http://www.fph.org.uk/uploads/r_great_outdoors.pdf (accessed 19.11.2015).

Gilchrist, M., Passy, R., Waite, S. & Cook, R. (forthcoming) Exploring schools' use of natural spaces, in Freeman, C. & Tranter, P. (eds) *Risk, Protection, Provision and Policy*, Vol. 12 of Skelton, T. (ed) *Geographies of Children and Young People*. Springer, Singapore.

Gill, T. (2014) The Benefits of Children's Engagement with Nature: A Systematic Literature Review, *Children, Youth and Environments*, 24(2): 10-34.

Glover, D. and Coleman, M. (2005) School Culture, Climate and Ethos: interchangeable or distinctive concepts? *Journal of In-Service Education*, 31(2): 251-271.

Gustafsson, U. (2002) School Meals Policy: The Problem with Governing Children, *Social Policy and Administration*, 36(6): 685-697.

Harford, D. (2015) Letter to MP Sharon Hodgson. Available at
<http://www.schoolfoodplan.com/wp-content/uploads/2015/02/APPG-School-Food-Letter.pdf> (accessed 19.11.2015).

Jarvis, P. & Parker, S. (eds) (2007) *Human Learning: an holistic approach*, London and New York: Routledge.

Kahneman, D. (2011) *Thinking, Fast and Slow*. Penguin: London.

Louv, R. (2008) *Last child in the woods: Saving our children from nature-deficit disorder*. New York: Algonquin Books of Chapel Hill.

Mercer, N. & Howe, C. (2012) Explaining the dialogic process of teaching and learning; the value and potential of sociocultural theory, *Learning, Culture and Social Interaction*, 1: 12-21.

Moss, S. (2012). *Natural Childhood*. National Trust Report. Available at: <https://www.nationaltrust.org.uk/documents/read-our-natural-childhood-report.pdf> (accessed 19.11 2015).

Ofsted (2015) *The common inspection framework: education, skills and early years*. Available at: <https://www.gov.uk/government/publications/common-inspection-framework-education-skills-and-early-years-from-september-2015> (accessed 19.11.2015).

Ofsted (2008) *Learning outside the classroom: How far should you go?* Available at: http://www.leics.gov.uk/learning_outside_the_classroom.pdf (accessed 19.11.2015).

Oliver, A. (2013) Introduction, in Oliver, A. (ed) *Behavioural Public Policy*, Cambridge: Cambridge University Press.

Orme, J., Jones, M., Kimberlee, R., Weitkamp, E., Salmon, D., Dailami, N., Adrian, M. & Kevin, M. (2011) *Food for life partnership evaluation: full report. Project Report*, University of the West of England, Bristol.

Ozer, E. (2007) The effects of school gardens on students and schools: Conceptualization and considerations for maximising healthy development, *Health Education and Behaviour*, 34(6), 846–63.

Page, A. (2012) *Food Growing in Schools Taskforce: Report, March 2012*. Available at: <http://www.foodshare.org.uk/wp-content/uploads/2012/03/FGIS-Main-Report-March-2012.pdf> (accessed 19.11.2015).

Passy, R. (2014) School gardens: teaching and learning outside the front door, *Education 3-13: International Journal of Primary, Elementary and Early Years Education*, 42 (1), 23-38, DOI: 10.1080/03004279.2011.636371.

Passy, R., Reed, F. & Morris, M. (2010) *Impact of school gardening on learning: Final Report submitted to the Royal Horticultural Society*. Available at: https://www.nfer.ac.uk/publications/RHS01/RHS01_home.cfm (accessed 19.11.2015).

Public Health England (2015) *Child Obesity*. Available at: http://www.noo.org.uk/NOO_about_obesity/child_obesity.

Public Health England (2014) *The link between pupil health and wellbeing and attainment*.

A briefing for head teachers, governors and staff in education settings. Available at:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/370686/HT_briefing_layoutvFINALvii.pdf (accessed 19.11.2015).

Rabin, M. (2013) Healthy habits; some thoughts on the role of public policy in healthful eating and exercise under limited rationality, in Oliver, A. (ed) *Behavioural Public Policy*, Cambridge: Cambridge University Press

Teeman, D., Featherstone, G., Sims, D. & Sharp, C. (2011) *Qualitative Impact Evaluation of the Food for Life Partnership programme*. Available at:
https://www.nfer.ac.uk/publications/BINT01/BINT01_home.cfm.

Thaler, R. and Sunstein, C. (2009) *Nudge: improving decisions about health, wealth and happiness*. Penguin: London.

Wattchow, B. & Brown, M. (2011) *A Pedagogy of Place: outdoor education for a changing world*. Clayton: Monash University Publishing.

Waite, S. (2013) 'Knowing your place in the world': how place and culture support and obstruct educational aims, *Cambridge Journal of Education*, 43(4): 413-433,
DOI:10.1080/0305764X.2013.792787.

Waite, S. (2015) Culture clash and concord: supporting early learning outdoors in the UK. In: H. Prince, K. Henderson & B. Humberstone. (eds.) *International Handbook of Outdoor Studies*. London: Routledge.

Williams, D.R. & Scott Dixon, P.S. (2013) Impact of Garden-Based Learning on Academic Outcomes in Schools: Synthesis of Research Between 1990 and 2010. *Review of Educational Research*, 83(2): 211–235. Available at: <http://rer.sagepub.com/cgi/doi/10.3102/0034654313475824>.

World Health Organisation (2015) *Obesity and overweight*. *World Health Organisation Fact Sheet No. 11*. Available at: <http://www.who.int/mediacentre/factsheets/fs311/en/> (accessed 19.11.2015).

YoungMinds (2015) *Mental Health Statistics*. *YoungMinds information sheet*. Available at: http://www.youngminds.org.uk/training_services/policy/mental_health_statistics (accessed 19.11.2015).

