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Growing Our Future

The impact of growing food in schools as part of a broader food education programme.


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for organic growing

Growing Our Future

In the past five years, the Food for Life Partnership (FFLP) has been working in schools across England to transform food culture. A significant element of the FFLP's work has been setting up school gardens and embedding food-growing activities in class to meet curriculum targets.

Until now, the positive impact of food growing on learning and participation has only been seen through observation and anecdote. This report highlights important evidence about the diverse range of benefits that food growing in schools offers and the worthwhile role growing activities play in a child's educational experience.

Introduction to the report

This report presents the findings of an evaluation conducted by the University of Bath's Centre for Research in Education and the Environment on the impact of growing food in schools as part of a broader food education programme.

The evaluation used a case study method, drawing on documentary analysis, school visits, e-consultations, telephone interviews and focus groups with pupils, teachers, parents and other stakeholders of a diverse selection of nine flagship Food for Life Partnership (FFLP) schools across England: five primary, three secondary and one special school.

About the Food for Life Partnership

Funded by the Big Lottery Fund, the FFLP is a unique education programme for transforming food culture across schools. The programme brings together the expertise and enthusiasm of four food-focused charities – the Soil Association, the Focus on Food Campaign, the Health Education Trust and Garden Organic – to empower schools, teachers, caterers, food

producers, pupils and health professionals to work together to create a better food culture. So as well as revolutionising school meals to serve healthy and sustainable food, the FFLP is as much about practical education, reconnecting children and young people with where their food comes from, and inspiring families and communities to grow and cook food.



The impact of growing food as part of the FFLP

The evaluation's findings demonstrate the diverse and far-reaching impact of growing activity in schools. Five key impact areas explain the vital educational, personal and practical benefits that growing offers to pupils, teachers, parents and the wider school community:

- Acquiring skills and knowledge
- Understanding and appreciating the environment
- Improving health and wellbeing
- Encouraging positive values and behaviours
- Increasing participation in school and the wider community

These impact areas are brought to life through a number of case studies that showcase the impressive way schools have embedded growing activities into their education programme. This report features a cross-section of these case studies and concludes with a summary of the evaluation's best-practice recommendations to schools on how to optimise the impact of growing as part of a food education programme.



“Garden Organic has been working in schools on gardening projects for the last decade and has always been convinced of the positive impact these projects have on children. In the past five years, through our work on the FFLP, this belief has been reinforced, and we have seen first-hand the wide-reaching benefits of engaging children in food growing. Until now, these benefits have been largely anecdotal, but with this report, alongside the earlier Good Food for All report, we can see the plentiful and practical evidence that proves food growing in schools is a valuable asset to the educational experience of the child, the school and the wider community.”

~ Myles Bremner, CEO, Garden Organic

Acquiring practical skills and knowledge



“It’s like you know you’ve grown something from a little seed and then you eat it. [That is good] because you know where it’s come from.”

~ Pupil, primary school

Practical food-related skills:

Propagating, planting, growing, pruning, harvesting, composting and cooking were just some of the practical skills developed by pupils, staff and others involved in growing activities.

Inspirational learning:

The growing experience brought some unexpected learning outcomes. Schools reported examples of how, when things went wrong with growing, it was useful and inspirational for pupils.

Enterprise and vocational skills:

Growing activity developed leadership, planning, decision-making, problem-solving, critical-thinking and enterprise skills. One urban secondary school reported how their involvement in the FFLP, and work with farms in particular, broadened pupils’ ideas about jobs and careers. Other schools also gave examples of important enterprise and vocational skill development.

Social and interpersonal skills:

Crucial social and interpersonal skills were developed through working with other pupils, staff, parents, carers, grandparents and community members to plan and make decisions, for example, about the growing calendar.

Holistic knowledge, understanding and awareness:

By linking growing to other aspects of the curriculum, both formal, non-formal and hidden, pupils developed an awareness of the idea of ‘seed to plate’ and the nature of healthy eating and sustainable living. In all of the primary schools, growing plans were integrated with curriculum topics, and although curriculum links may be more challenging in secondary schools, there were examples of good links in subjects such as food technology.



Case study: Growing together

An urban primary school made productive connections between FFLP activity and international links, forging partnerships with schools in England, France, Turkey, Spain and Poland through a joint Comenius project funded by the European Union. Pupils shared details with students from the link schools about what was grown in each of their areas and how the food was used in local recipes. Pupils learnt about food that is grown and eaten in different places across Europe, and together they worked on compiling a healthy cookbook of national dishes.



Understanding and appreciating the environment

Teaching pupils to care:

Growing food had a hugely positive impact on inspiring pupils to respect and care for the environment. This was a recurring theme from school staff, not just in terms of the physical environment, but also for the wildlife that lived in and around the growing area.

“Our grounds, since we’ve started FFLP, have totally changed. ... Wherever we can grow, we’re growing.”

~ FFLP coordinator, primary school

Inspiring change:

Pupils and staff were enthusiastic about growing and took pride in the outcome. Such was the enthusiasm for growing since being involved in the FFLP, all schools had increased the amount of land available for growing and broadened their range of growing activities. Composting, irrigation, and the number of shelters and other resources had also been increased.

“Even the toughest of the tough care, and they’re not afraid to show it”

~ Head teacher, primary school



“The whole school has become galvanised into doing things with food.”

~ Farm coordinator, secondary school

Living more sustainably:

Growing inspired pupils, teachers and the wider school community to live more sustainably. Schools not only reported better management of food, and less actual waste produced, but many of the pupils, parents, carers and staff started to grow at home since their involvement with the FFLP and make positive changes in their food sourcing, cooking and food waste practice outside of school.



Case study: Linking and experimenting

An infant school in an urban fringe location linked their FFLP work to the Forest Schools initiative. Growing took place all around the school and was interwoven with areas where natural woodland was made accessible to the children. This gave the school the look of a place where learning is as much an experience of the outdoors as the classroom.

The school also participated in Garden Organic Members' Experiments through growing heritage varieties of crops and saving seeds. This added a different dimension to the children's learning by giving it historical and cultural significance. It also increased the amount of interaction with the Garden Organic team, which encouraged pupils to continue to develop and maintain the work that they were doing.





Improving health and wellbeing



Case study: Community embedding

A village school that served a widespread farming community with a conservative approach to food felt that its strong link to growing and food was important for the school. The village set out to deliberately foster a community interest in food, growing and sustainability through a number of initiatives:

- A community orchard with fruit trees spread across the village (including in the school)
- A communal potato field (the children grew, looked after, harvested, cooked and ate 'their' potatoes)
- Providing garden tools to the school on the proviso that they were available for use in and by the community when needed
- A pub chef cooking a recipe developed by the children

The school had strong links to a very local organic grower, who regularly spent time in school with the children and provided products for their gardening club.

Adopting a healthy diet:

Lunches that regularly included food grown by pupils helped to reinforce core messages and understanding about healthy eating. The consensus in all schools was that since growing as part of the FFLP, menus and school meals had improved, with pupils eating better at lunchtime, more willing to try new foods, and increased numbers enjoying school lunches or bringing healthier packed lunches.

"I'm developing it more as an outside classroom, so it's not just the ethos about growing; it's actually a nice place to be; it's airy."

~ FFLP coordinator, special school

Encouraging physical activity:

The fresh air and physical activity experienced as part of growing food had a hugely positive impact on pupils. Many stakeholders reinforced this, not only in terms of helping pupils to develop their physical strength, fitness, coordination and skills, but also to enhance their wellbeing, engagement and enjoyment at school. In fact, being outside had such a positive impact on pupils that teachers were inspired to extend their use of outdoor spaces for learning.

Restoring a sense of calm:

Pupils felt the therapeutic benefits of growing. Adult stakeholders involved in growing at school reported a calming and therapeutic effect on both themselves and pupils.

"They're much more interested in the food they eat now. I think that's a huge impact. They will try it, even if they end up not liking it."

~ FFLP coordinator, primary school

Building confidence:

Growing activity increased self-esteem and confidence, especially in pupils who didn't flourish in other aspects of school life.



"Yes, we want to do the best for the children and want them to achieve as highly as possible academically, but we also want them to feel valued and prepared for life."

~ Head teacher, primary school

Providing a complete picture:

A strong growing component to the FFLP made it possible to present a complete picture of food and its significance for human health and wellbeing. All schools made explicit links between their ongoing commitment to healthy schools and lifestyles and their FFLP work. These links were expressed in terms of diet, food culture and health, and also through the value of outdoor activity and being in the fresh air.

Encouraging positive values and behaviours

Engaging pupils:

Schools reported pupils receiving a great sense of satisfaction from growing and feeling proud about making a positive contribution to their school and the wider environment. Indeed, many pupils inspired change in their own families by starting to grow food at home.

“You feel really proud of yourself at the end, that you’ve actually managed to grow something.”

~ Pupil, primary school

Inspiring a positive attitude:

Growing brought out the best in pupils, inspiring a positive attitude towards school, learning and the way they interact with others. A number of schools reported improvements in behaviour and socialisation, not just in the context of the actual growing experience but also elsewhere in school.

“It has been very beneficial, particularly for some children who find it difficult to make friends or have emotional difficulties. It has been very, very beneficial.”

~ FFLP coordinator, primary school



Case study: A school bistro

An urban special school for pupils with social, emotional and behavioural difficulties transformed its food technology lessons by setting up a community restaurant. Every Thursday, the food technology classroom was transformed into a bistro, seating up to 15 people for three-course meals. Guests could watch the food being prepared and cooked by the chef (the food technology teacher), and pupils served the food ‘waiter’ style. The chef and pupils used fresh produce from the school’s impressive kitchen garden, which had numerous vegetable beds, polytunnels, composting, an orchard, an irrigation system and a large potting shed. The bistro was extremely popular with staff and the local community.



Teaching a sense of responsibility:

Pupils learnt the responsibility that comes with keeping plants and animals, including feeding, caring, cleaning and maintaining.

“People enjoy it. It’s fun for everyone and a chance for everyone to get messy”

~ Pupil, primary school

Fostering a caring role:

Growing brought out the caring side of pupils. Contact with living things was reported as beneficial by schools, particularly for children who found it hard to make friends or those with emotional difficulties.

Improving relationships:

The growing environment brought people together: Compared to formal classroom settings, schools reported that working alongside each other in the fresh air forged better teacher–pupil relationships, as well as improved relationships between pupils.

“It’s definitely impacted on behaviour. It’s positive. It does bring out the best in the kids.”

~ FFLP coordinator, primary school

Preparing for the future:

Growing as part of a broader education programme helped children prepare for life after school. Schools reported that growing food provided a good fit with their ethos and purpose. This was particularly the case with regards to educating the whole child, not just academically but also in terms of helping children to feel valued and prepared when they leave school.

Increasing participation in school and the wider community

Removing barriers:

Growing activity was an excellent way of enabling all pupils, staff and the wider school community to participate and make a contribution to school life. The FFLP had a particularly positive impact on pupils from disadvantaged communities, children with special educational needs, students with social, emotional and behavioural difficulties, and some pupils who did not otherwise flourish at school, as growing gave them a sense of satisfaction, achievement and enjoyment.

For example, the special school, and other schools where special educational needs and pupils' behaviour were a focus of FFLP work, reported improvements in food consumption and some evidence of pupils starting to cook with their parents, or cooking anything at all for the first time.

“It’s given [the pupils] an opportunity to work in a way that they now are successful.”

~ FFLP coordinator, special school

Giving pupils a voice:

Growing empowered pupils to shape their experiences, make decisions and be heard, both in the classroom and at home. Schools reported pupils' involvement in shaping the lunchtime experience, including redesigning dining spaces and menu planning, and inspiring parents to grow at home.

“My family didn’t really want to grow anything, and I came home and said I really wanted to grow things because it was really fun and healthy, and we started.”

~ Pupil, primary school

Contributing to the community:

Growing was widely recognised as a way of contributing to a school's sense of community. Encouraging local food sourcing, challenging the existing food culture and learning with and from the community were just some examples of how schools achieved this.

Learning with and from the local community:

Schools often looked to their local and community networks to sustain their growing and implement activities such as gardening or cookery clubs. They regularly utilised the skills of local growers, gardeners and farmers,



Case study: Productive partnerships

An urban secondary college's FFLP activity led to a number of productive partnerships within the local community, including an allotment and a farm.

The college had its own plot on the local allotment. Pupils benefited from the horticultural expertise of the allotment holders, who supported the school's work by attending meetings and lessons, as well as working alongside pupils at the allotment. Produce was used in various ways, including in the school canteen and in cooking activities with the pupils. The children were very enthusiastic about their allotment work, and there was clear evidence of intergenerational learning between pupils and the allotment holders.

The college also had a close partnership with a farm 15 miles away. All pupils had experience of the farm, but it had a particular role in supporting pupils with behavioural issues. A minibus left the college every day at 8.30am for the farm, and all Year 7 pupils visited for a day in the summer term. The college had its own plot on the farm for growing and also kept chickens there. The farm lead said that this partnership was especially helpful for pupils with behavioural issues, who gained a great deal from regular practical, physical and vocational experience on the farm. The farm partnership also influenced the job aspirations of the college's 'urban' pupils, who did not typically consider jobs on farms.

which encouraged pupils to interact with and learn from a wide group of people. This interaction gave students important social, economic and cultural elements to their experience of producing and eating food.

Involving others:

Growing presented an excellent way of enabling others to participate in school life by providing relevant skills and experience that school staff did not always have. Schools reported that growing was typified by pupils not only working alongside staff, but also with parents, carers, grandparents and community members. For example, in one school, a group of parents supported growing every week by taking children out of their classes in rotation to work on the class bed.

Getting the most out of growing: A lesson for schools

Growing provides a diverse range of unquestionable benefits as part of a broader food education programme. However, the evaluation highlights a number of key elements that are essential to optimising the impact of growing as a set of activities that children take part in, learn through and benefit from:

- Develop a whole school ethos
- Establish multi-skilled leadership
- Integrate learning
- Include everyone

Develop a whole school ethos

- A focus on food and growing activities can support and develop a school ethos that places an emphasis on healthy lifestyles and enhancing wellbeing, environmental sustainability, building networks in the community, and embedding the school within that community.
- Pupils learn more about a school's values and commitment to food and growing when what it is trying to teach is reinforced by pupils' everyday experiences.
- A school that takes 'food for life' as an integrating framework across curriculum, campus and community is able to increase the coherence and effectiveness of what it is trying to achieve.
- If the school lives out its values in practice, pupils are more likely to realise its good food goals in relation to positive lifestyles.

Establish multi-skilled leadership

- School leadership is crucial in ensuring that food and growing activity becomes successfully embedded in everything the school does.
- For food and growing activity to become more embedded in a school, the work needs to be driven by multi-skilled teams that include pupils.
- To ensure that a food education and growing focus is sustained, schools need, where possible, to make formal appointments for all staff with food education roles.
- Following initial expert input, for example from Garden Organic, schools can sustain growing activity by drawing on local and community networks, including local growers, gardeners and farmers.

Integrate learning

- Integrating formal curriculum inputs with informal and hidden



- approaches, through clubs, food growing in the school grounds, lunchtimes, and family and community-based activities, is necessary to provide coherent messages around food and growing.
- Schools that integrate pupils' growing, cooking and eating experiences across all aspects of their learning reinforce positive messages about 'seed to plate', healthy eating and positive lifestyles.
 - Lunches that regularly include food grown by pupils or local people involved with the school help to reinforce core messages and understandings about healthy eating.

Include everyone

- Every child, regardless of age, background or ability, should have the opportunity to participate, make a contribution to school life and benefit from the wide range of educational, wellbeing and social benefits that growing activities bring.
- Growing should take place throughout a child's schooling. Although primary schools find it easier to involve all children systematically in growing activity because of how their curriculum, learning environment and school days are organised, evidence from secondary schools shows that they can overcome problems and barriers.
- Growing activities that involve parents, carers, grandparents and others from the wider community add important social, economic and cultural elements to the experience of producing and eating food.
- The more that pupils and parents are involved in decision making around food growing and cooking experiences, the more likely it is that what they experience will reinforce positive messages about healthy eating and positive lifestyles.

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To read the full report, please visit www.gardenorganic.org.uk/organicgardening/schools_fflp.php



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Garden Organic is the UK's leading organic growing charity, and is dedicated to researching and promoting organic gardening, farming and food. We are driven by an enduring passion and belief, founded on over 50 years of research and practice, that organic methods provide a healthy, sustainable life for us all.