



Together we help children grow

THE STATE OF PRIMARY SCHOOL GARDENING IN THE UK



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Forewords



The rise of gardening in schools has been quite staggering over the past decade. It has slipped seamlessly into the primary school environment, providing a new and dynamic way for teachers to educate hungry little minds. Gardening covers so many parts of the curriculum, maths, science, art, physical exercise and very importantly, team work. It is the perfect vehicle for hands on learning. National Children's Gardening Week is a great way to mark this success, to put some time aside and celebrate all things kids gardening.

Chris Collins

**Lead Ambassador
National Children's Gardening Week**



School gardening is a great way for children to transfer what they learn in the classroom into real life experiences. It's extremely important to get younger generations into their gardens and benefit from all that nature and the outdoors have to offer. National Children's Gardening Week is the perfect way for the whole nation to get involved in doing this, and we're delighted to be supporting school gardening through the campaign.

Adam Taylor

**President
Horticultural Trades Association**



Executive Summary

School gardening plays a huge part in children’s well-being and education. Over 1.5 million children in 90% of the UK’s primary schools are involved.

The independent survey of 402 primary school head and deputy head teachers that forms the basis for this report, shows high support for school gardening. 94% of survey participants agree that school gardening benefits either pupils’ physical health, mental well-being, social skills, behaviour or concentration.

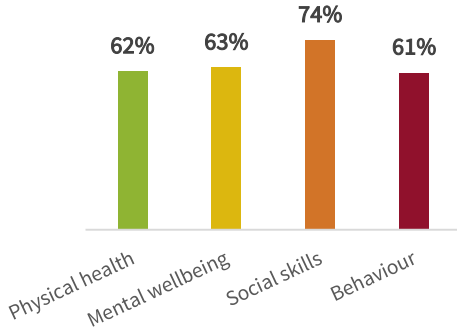


Chart 1. % of UK primary head/deputies who agree school gardening delivers different benefits.

In spite of this consensus on the benefits of gardening, schools need more help. Primary schools typically have just 33p per pupil to spend on school gardening; teachers report a need for more funding, volunteers, and materials to draw upon that link school gardening to the curriculum.

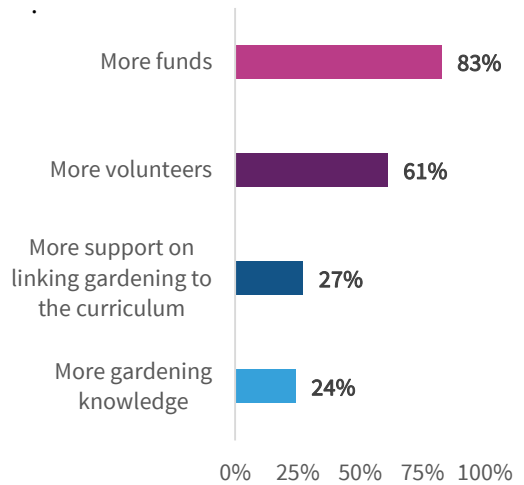


Chart 2. % of UK primary school heads/deputies who want more support in different areas.

National Children’s Gardening Week aims to provide activities and resources for families and schools around children’s gardening. We’re proud to be able to highlight the excellent work our schools are doing to support children through school gardening, and to highlight other sources of support and information like the RHS School Gardening campaign.



The need for school gardening

The scale of our impact on the planet has never been greater. For years, we've adapted our environment to suit the human way of life, without much thought for the effects of our actions, good or bad.

Overpopulation, increased consumption, pollution, energy use and waste are all damaging the environment that gives so much back to us.

Gardens are being paved over at an alarming rate, with plant-free paved-over gardens tripling to 4.6 million in the last 10 years. Now, half of all gardens in London are paved¹.

Children aren't playing outside as much as previous generations, spending 17 hours each week watching television and 20 hours online². A report by the National Trust states the area around the home in which children are allowed to play, has declined by almost 90% since the 1970s; driven by parental fears over safety².

Being stuck indoors may be disconnecting children from the natural world. In a 2008 survey one third of children could not identify a magpie, meanwhile half could not tell a bee from a wasp².

Currently just 23% of boys and 20% of girls meet the national recommended level of physical activity³. This inactivity is matched with a low fruit and vegetable intake, averaging just 3.1 servings per day for children in England⁴.



The number of children with mental health issues has also significantly increased generationally, with one in ten 5 to 16-year-olds now clinically diagnosed⁵.

There is clear evidence to show that attitudes towards health and wellbeing as a child act as a template for adult habits.

We need to support the future: our children. We recommend school gardening as an effective way to do this.

There are 5.5 million primary school pupils in the UK⁶, spending an average of 635 hours in the classroom per year. An average of 45% of compulsory curriculum consists of core subjects: reading, writing, literature, mathematics and the arts⁷.

Our research shows overwhelming agreement among primary school teachers for the benefits of school gardening. We believe more support for school gardening would yield tremendous benefits for the UK's children.

School gardening – the benefits

As well as being good outdoor fun, school gardening has been shown to have many benefits to health and wellbeing.

Physical health

Research has shown that school gardening encourages children to take more responsibility for their own physical health, safety and diet⁸. Children with access to decent green space are 24% more likely to be physically active². An average of 250 calories are burned per hour of low intensity gardening, rising to 318 calories for higher intensity tasks such as digging⁹.

The children become active in varied and imaginative ways, so gardening is often not seen as exercise². Learning to delicately grasp roots and stems amongst other more intricate movements also develops fine motor skills¹⁰ that can help in many other aspects of school life, such as holding a pen.

As well as encouraging a healthier lifestyle through activity, school gardening has also been shown to improve children's fruit and vegetable intake by a portion a day, when offered at a high intensity¹¹. Willingness to try new



vegetables at home can also increase when children are involved in the growing and cooking process at school¹⁰.

Mental wellbeing

There is a strong correlation between happiness and feeling connected with the natural world². Of patients involved in mental health charity Mind's green exercise activity programme, 90% report that the nature-exercise combination is the most important factor in determining how they feel¹².

This is unsurprising given that garden rehabilitation programmes have been shown to significantly reduce the number of healthcare visits among sufferers of severe stress and mild-to-moderate depression¹³. The therapeutic features of a garden (e.g. water features, fragrant flowers) and facilitation of a place to be creative allows a mental escape from any stressors⁹.

Gardens are often 'peaceful' places for many, reducing stress and increasing engagement and motivation, particularly in the classroom¹⁴.



For children, there is a great sense of personal achievement, pride and empowerment in seeing their efforts come together¹⁰. Self esteem is boosted watching their work make a difference; meanwhile children learn patience, resilience and problem solving skills when the school garden takes time to take shape, or when adverse weathers cause set-backs¹⁰. Many children also encounter “difficult” things they have never experienced before - like a big insect². They learn to overcome their fears and deal with challenges, preparing them for navigation into adulthood².

Social skills

Working towards a common goal with peers (e.g. growing food for the school kitchen), helps pupils to break down many barriers to social interaction¹⁰.

As they work together in new and testing environments, confidence to work with other pupils increases and relationships are formed. Often, relationships are struck between pupils of different age groups allowing for role-modelling and advanced development¹⁰. Unlike in the classroom, academic abilities are quickly forgotten and all pupils start on a level-playing field⁸.

This is especially beneficial for children with learning, emotional or behavioural difficulties whose troubles can normally have an underlying effect on social confidence. School gardening creates ways to bring out non-academic strengths⁸.

Behaviour

Research into school gardening programmes has found that classroom behaviour often improves as a result of being given greater responsibility⁸. Being trusted with ‘dangerous’ tools gives children great pride. It also helps to develop self-restraint, when there are rules with clear consequences (e.g. like not having food to enjoy at school or at home)¹⁰.

School gardening has also been shown to improve concentration levels with children returning to the classroom ready and willing to learn⁸. New behaviours and boundaries are often tested along with patience and perseverance, as new challenges are faced¹⁵. Children with behavioural problems have been shown to get significant benefit by being given another purpose at school¹⁰.



Learning

At schools where gardening is offered, children can learn in more varied and interesting ways linked to their direct experiences². A wide range of subjects are covered including literacy and numeracy¹⁰; as questions are asked outdoors and follow-up activities completed in the classroom.

Learning is brought alive, encouraging children to use a more active approach to problem-solving and knowledge-seeking¹⁵. Vocabulary increases as well as knowledge about the natural environment¹⁰.

Research has also found that school gardening can increase the number of fruits and vegetables recognised by pupils' involved¹⁶, encouraging a healthier lifestyle which they can carry through the rest of their lives.

“Why try to explain miracles to your kids when you can just have them plant a garden?”

Robert Brault



The current level of participation

A 2018 survey of 402 primary school heads and deputies commissioned by National Children's Gardening Week shows strong belief in the benefits of school gardening ¹⁷.

Nine in ten UK primary schools are doing some school gardening, albeit in the curriculum for only 37%. Three quarters offer school gardening as an extra-curricular activity. The typical UK primary school has two or three year groups taking part, whilst 43% offer their programmes to 3 or more year groups. Although children across all age ranges take part, it's mainly 5 to 8-year-olds that tend to be involved.

Six in ten head and deputy headteachers say that school gardening helps to improve pupils' physical health, mental wellbeing and behaviour. Meanwhile, three quarters agree that it helps to improve social skills.

Almost one third (29%) of primary schools purchase their supplies from specialist garden centres which is the highest source relative to DIY stores (21%), supermarkets (20%) and online retailers (18%). However, 19% of schools rely solely on donations.



Eighty-three percent of head and deputy headteachers agree that more funds would help their school get more benefit from school gardening. For 61% lack of volunteers is a barrier to more school gardening. A quarter of schools believe support in linking school gardening to the curriculum and more gardening knowledge would help.

These figures mean that only around 1.5 million of the 5.5 million primary school pupils in the UK get to do school gardening. Across all the UK's primary pupils, schools have on average only around 33p per pupil to spend on school gardening, in spite of its clear benefits.

Calls to action

The importance and benefits of encouraging children and young people to engage with nature are clear and greater than ever.

The UK's schools

We encourage schools to tap into the resources available to support school gardening.

National Children's Gardening Week provides free resources and ideas to get children into the garden and engaged with the natural environment.

The RHS School Gardening Campaign has some fantastic information and resources for developing your school gardening.

The UK's parents

Please do consider requests from your child's school, for donations of gardening products, time, or equipment. You'll be making a massive difference to their work with children.



Do also get involved in National Children's Gardening Week and have fun with your family. There are plenty of events going on in garden centres across the country and ideas for children to enjoy on the website.

The UK's governments

We call on the UK governments to continue their commitment to supporting school gardening and connecting children and young people with nature. We call for horticulture to be embedded in the curriculum and active government promotion of it within schools. We welcome the announcement of 2019 as the Year of Green Action.

Resources for schools	Website
National Children's Gardening Week	www.childrengardeningweek.co.uk
RHS School Gardening Campaign	schoolgardening.rhs.org.uk



Sources

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- 17 – Independent survey of 402 UK primary school head and deputy headteachers from C3 Education's National Education Research Panel (NERP)





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