

Developing pupil-led shared garden spaces in primary schools in Scotland



We wish to thank all participating schools in this project for sharing their experiences of shared garden spaces with us:

Heatheryburn Primary School

Woodside Primary School

Kaimhill Primary School

Bramble Brae Primary School

Scotstoun Primary School

Blackhall Primary School

Special thanks also to One Seed Forward for facilitating access to the schools and their advice: <http://oneseedforward.co.uk/>

Data collected through this research community informed the Scottish Government-funded Scottish Attainment Challenge project, ["Reconceptualising attainment through shared learning spaces, which promote achievement, health and wellbeing"](#).

Researching pupil-led garden spaces

Previous research has suggested that shifting the teaching focus from curriculum knowledge to action, centred on growing vegetables and caring for gardens, has significant potential to enhance engagement, responsibility and learning in young people in areas with high levels of social and economic deprivation ([see Gray et al., 2019](#)). In light of this, the aim of our study was to investigate teachers learning with pupils in school garden spaces, and what impact this had on the learning, wellbeing and achievement of pupils, as well as on teachers' understandings of attainment.

We conducted interviews with teachers and headteachers from six schools in Aberdeen City and Edinburgh (ranging in categorisation from decile 1 through to decile 10 on the Scottish Index of Multiple Deprivation (SIMD)), featuring food growing garden spaces. In addition, five student teachers interested in developing shared garden spaces were interviewed as a group.

An emphasis on pupil ownership was incorporated from the very beginning of the development of the primary school garden spaces, with pupils designing and then creating the garden themselves. Pupils viewed the spaces as their own creations and took on the role of safeguarding and sustaining them.

The study examined the shared garden space as a 'place' of co-production of the curriculum, which arises from the agency of the pupils 'being and doing' gardening. Specifically, we focused on teachers' prior exposure to outdoor learning and/or knowledge of gardening; the choices that they make with regards to planning, classroom management and assessment in order to support children's learning; and additional professional needs and requirements to support children's access to the formal curriculum in specific subject areas, such as science. The interviews provided detailed perspectives from the interviewees on how they perceive the gardens as being an enabler of children's learning and attainment, as well as their prior exposure to gardening and their personal and professional motivations.

We wanted to learn more about:

- The impact of engaging in the shared space on the learning, achievement, health and wellbeing of pupils.
- How headteachers, teachers and student teachers perceive and articulate their ideas of pupils' attainment while learning in the garden.
- The motivations of headteachers, teachers and student teachers in terms of the value of the gardens for promoting achievement.

Creating shared garden spaces



What our participants told us:

Nature and Nurture

[The class] were quite a boisterous lot and it was very nurturing for them to look after things, seeing the development from planting it as a seed, water it, and seeing it grow. [Teacher]

Children need nurture. And this is a great way for them to understand the importance of nurture, whether it's their tatties or their strawberries, they're learning how to be nurturing towards something, which is hugely beneficial for them. [Headteacher]

Taking a leading role

I've worked with a whole range of pupils who have not been interested in some of the work we do in class. Gardening has helped them develop greater confidence in themselves, they see themselves as a leader. [Teacher]

If people have an enthusiasm for it, capture it and let it go, let them run with it, and it gives the staff a sense of empowerment, as well as the children. [Headteacher]

Creating, making and caring

Then they got to share round the other classes when we did harvest it. So they had that sense of pride, we've managed to grow this from scratch and make it into something. [Teacher]

It also makes them feel even more part of the school, they're more interested in their surroundings, they take better care of things if they're involved in creating. [Teacher]

Community development

I think if parents are coming in and doing gardening with their children, it's very positive for the child, it's time spent with their parents. There's everything from the counting to the research to the cooking, it's such a massive amount of information that they can get from learning together. [Community Support Teacher]

We have a huge amount of vandalism in this area, very challenging. And one of the real positives, which I guess shows the importance of it to our children, we've had no vandalism in the garden at all. I do think that there's a real positive attitude about it, the children have a pride in it, there's quite a community feel to it, sort of community of responsibility. [Headteacher]

What's really impressed me is how engaged, how on board people have been, children and adults across the school. That's been lovely for me as a headteacher. They've really embraced it because they can see how much it impacts on the children. [Headteacher]

Key findings from case study 2:

- Teachers saw the potential of the gardens for raising pupil achievement; attainment was re-conceived as a set of capabilities, including observational, communication, practical and organisational skills.
- Participating in the Shared Garden Space created opportunities for pupils to take on the role of expert and lead learning, increasing confidence and a sense of self-worth that visibly fed into other aspects of their learning.
- Engaging in the garden space also benefited the physical and emotional health and wellbeing of pupils, teachers and their parents; it raised awareness of healthy eating and sustainability, and fostered a sense of resilience and community spirit.
- Student teachers were enthusiastic about the potential of school gardens as inclusive spaces, and were viewed by school staff as vital to facilitating transformational change
- However, strong leadership, strategy and creating a 'community' approach in schools was required to effectively support and sustain shared garden spaces and realise their potential.

Project Team

Principal Investigator: Dr Laura Colucci-Gray

Co-PI: Dr Donald S. Gray

Research Assistant: Jonathan Hancock

Support Partner: One Seed Forward

