My School, My Planet

Evaluation report





Learning through Landscapes







This report was written by The Centre for Education and Youth. CfEY is a 'think and action-tank'. We believe society should ensure all children receive the support they need to make a fulfilling transition to adulthood. We provide the evidence and support policy makers and practitioners need to support children. We use our timely and rigorous research to get under the skin of issues affecting children in order to shape the public debate, advise the sector and campaign on topical issues. We have a particular interest in issues affecting marginalised children.

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"My School, My Planet has been a stepping-stone towards opening up across the key stages so that all children within the school have an opportunity to be able to learn outside. We can learn so much as a school from the outside providers who are coming in with a skill set to help us enhance their learning" —Senior School Leader

Foreword

Learning through Landscapes is a charity deeply committed to its vision of creating a society where the benefits of spending regular time outdoors are valued and appreciated. We believe that outdoor learning, play and connection with nature are fundamental parts of education, at every stage, for every child and young person.

Yet access to these fundamental parts of education has become a matter of social justice. Increasingly we see misconceptions about the benefits of outdoor learning and play in mainstream education creating a widening gap between disadvantaged pupils and their advantaged counterparts.

2020 was a year that challenged us all. During the lockdown it became increasingly obvious how important connecting with nature is for the physical and mental wellbeing of children and young people. Whilst COVID-19 swept the world, the Black Lives Matter movement shone a light on the incredible inequality rife across the globe.

To begin to tackle these inequalities, with emergency funding from The National Lottery Heritage Fund, we delivered My School, My Planet, a pilot project developed to improve the outcomes of children from disadvantaged ethnic groups and low socioeconomic backgrounds. The project was deployed at exceptional speed, during an incredibly challenging period, to support children, schools, and communities when they were most in need.

We were guided by Louder than Words, a non-profit organisation passionate about developing engaging community projects for hard-to-reach children and young people. Their invaluable support enabled us to explore complex educational, societal, and



environmental injustices faced by children living in disadvantaged and marginalised communities. One of many conscious decisions they supported us to make was not to use the term 'BAME', you will not see it in this report, as so many young people do not feel it is a fitting term to represent their identity within a progressive society.

We were surprised to see how few children selected climate change from the project themes. This challenged our perception that all young people are engaged in this issue, we thought it would be the most popular of the three topics. This misconception is prevalent across popular media and needs addressing urgently so that every child can play an equal part in the protection of the planet for their futures.

Despite this, it is clear from this report that the project has had an immediate and measurable impact on children's ability to engage in environmental issues, in helping them feel more positive, and to gain knowledge about the natural environment, their role within it and within their society.

We need dedicated action to tackle the lack of diversity within our sector. It is essential that children and young people see themselves represented or we risk more people feeling excluded from nature because of their cultural heritage, gender or sexuality.

Above all, we urgently need to leverage funding to bring My School, My Planet to every school in the UK and tackle the social injustices felt by so many children head on.

Carley Sefton CEO, Learning through Landscapes

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Executive Summary

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My School, My Planet is an outdoor learning project, run by the charity Learning through Landscapes and funded by a £250k Heritage Emergency Fund grant from The National Lottery Heritage Fund as a response to the coronavirus (COVID-19) crisis. Learning through Landscapes has designed and delivered ground-breaking school grounds projects since 1990. The curriculum-led outdoor learning and play charity encourages children to connect with nature, become more active and learn outdoors.



The focus of the My School, My Planet (MSMP) pilot was to improve the outcomes of children from disadvantaged ethnic groups and low socioeconomic backgrounds who had the least access to the natural environment during the COVID-19 crisis and to support their physical and mental wellbeing. MSMP aimed to help children re-engage with learning after a significant period of time away from school during lockdown and encourage a greater connection to their natural heritage through the delivery of an outdoor learning programme.

A range of external partners brought their expertise to this project to ensure that MSMP was designed to tackle the complex educational, societal, and environmental issues faced by communities in disadvantaged areas. These include:

- Cultural consultant, Myvanwy Evans at Louder Than Words who supported trainers and Learning through Landscapes staff to embed diversity and inclusivity into the project through cultural mapping and journeys.
- Education and learning advisor, Chanel McPherson-George, Head of Science at Bedford Free School who provided a critique on the educational rigour of the project.
- Youth environmental activists, Dominique Palmer, Anita Okunde and Louis J. Butler who brought to life the issues and lived experiences of children and young people living in marginalised and disadvantaged communities.

The MSMP pilot intended to deliver the following nine outcomes, mapped onto three National Lottery Heritage Fund (NLHF) outcomes:

A wider range of people will be involved in heritage

- 1 A wider group of children are involved in learning about nature in school grounds.
- 2 Children feel engaged in issues about their local environment and natural heritage.

People will have greater wellbeing

- 3 Children feel more connected with the outdoor environment and nature.
- 4 Children have improved physical activity.
- 5 Children have improved social wellbeing.
- 6 Children have improved school motivation.

People will learn about heritage, leading to a change in ideas and outcomes

- 7 Children have improved understanding about their project topic (climate change, biodiversity or soils).
- 8 Children feel engaged and empowered to enact physical changes in their school grounds.
- 9 Children relate understanding about project themes to individual experiences of culture, cultural heritage and identity.

Learning through Landscapes led a network of community-based outdoor learning agencies to deliver a bespoke enriching outdoor curriculum to support children to learn about environmental issues such as biodiversity, climate change and soil degradation. These agencies provided outdoor learning trainers to deliver carefully sequenced and enriching outdoor curricula, designed by LtL. The agencies were:

- The Garden Classroom
- The Conservation Volunteers
- Field Studies Council
- Royal Horticultural Society
- STEM Northern Ireland
- Oasis Academy Trust

LtL offered support and guidance for trainers both during the lead-in to the MSMP pilot as well as ongoing support during the project itself. This support included:

- A three-day training week for all trainers in August 2020.
- Masterclasses, led by LtL staff, Louder Than Words, youth environmental activists, LtL's education and learning

advisor and The Centre for Education and Youth on the purpose of MSMP, evaluation, the cultural importance of MSMP in schools and understanding the voices of children.

- Three one-hour mentoring sessions for non-accredited trainers and others on request.
- Three live Q&As for trainers to discuss the cultural aspects of MSMP, evaluation and COVID-19.
- Ongoing Microsoft Teams channels for trainers to raise questions and issues, alongside a weekly update issued via Microsoft Teams.

The evaluation

In July 2020, LtL commissioned The Centre for Education and Youth (CfEY) to conduct an independent evaluation of the MSMP pilot. The evaluation brings together a mixed methods design combining baseline and endpoint survey data alongside interviews with MSMP project trainers and members of the schools' Senior Leadership Teams (SLT), as well as a range of qualitative data from children which was collected by LtL trainers in line with guidance from CfEY and analysed by the research team. The survey data was also cut to reveal outcomes across participating NLHF focus area schools (Appendix 1). The case studies also included one school in a focus area which is featured in Section 3.

The rationale behind the mixed methods design was that LtL intended for the MSMP pilot to contribute to the evidence base on outdoor leading through replicable, robust, validated measures wherever possible given the limited number of medium to large scale studies that currently exist in this area. On the other hand. LtL and CfEY recognised that metrics of this type do not necessarily capture children's unique experiences on a programme like MSMP, or the nuance behind complex concepts such as nature connection and empowerment. The metrics are also unlikely to shift dramatically over the course of a relatively short programme, although in this instance, some did. Combining quantitative measures with detailed qualitative data was therefore crucial and it is important to read across the different data sources in order to draw meaningful conclusions. Whilst tentative conclusions may be drawn from either the survey or case study data, where there is alignment between multiple data sources, this merits stronger and more confident conclusions.

1.1 Key findings

Overall, this evaluation reveals a positive, very promising set of findings from the My School, My Planet pilot.

Given Learning through Landscapes' intention for the project to benefit schools and children in deprived communities, it is particularly encouraging to note that a wide range of children participated, with many coming from socioeconomically disadvantaged backgrounds or from disadvantaged ethnic groups.

The evaluation finds a number of positive changes for the children involved in My School, My Planet (MSMP) across the nine project outcomes. In particular, children who took part in MSMP:

- Felt more engaged in local environmental issues: Children were more able to see that their actions in their school grounds might contribute to positive larger scale outcomes for the environment.
- Felt more positive and engaged in their school grounds: Children's feelings about their school grounds became more positive and they developed a greater sense of ownership of them. This was demonstrated through the actions they took as part of the project. Children made greater use of, and felt more connected to their school grounds at the end of the project than they did at the start. Children's improved knowledge of environmental topics, alongside their heightened sense of responsibility for the local environment may have contributed to their sense of empowerment and our findings in this area are consistent with the fact that there was a measured increase in children's sense of feeling 'useful', which was one of the specific statements used as part of a wellbeing measure.
- Became more physically active: There were measurable increases in children's physical activity during the project, whilst across all case study schools, children, trainers and school leaders commented on MSMP's positive impact on children's activity levels, especially in the context of children's recent declines in physical activity as a result of lockdowns and COVID-19 related restrictions.
- Gained new knowledge: Children's knowledge increased considerably in relation to the three environmentally focussed topics that children studied as part of the project (climate change, biodiversity and soils). Additionally, MSMP enabled children to make new conceptual links between the three topics.

The evaluation found promising, but more mixed evidence around other outcomes:

 Case study data revealed that children connected to nature in a number of ways during the project. There was also some measurable quantitative evidence of gains in nature connection among children who began the programme with a low-level of connection to nature. However, across the full cohort of survey participants, there was little change in children's average measured connection to nature. This is therefore an area to be investigated further.

- The evidence of impact in relation to children's social wellbeing was mixed: survey data did not demonstrate a note-worthy increase in children's social wellbeing between baseline and endpoint. On the other hand, qualitative case study data suggested that whilst MSMP may not have impacted on children's levels of happiness or satisfaction with life (measures that are designed to track overall feelings about life as a whole), the project may have contributed to a specific aspect of social wellbeing by fostering stronger friendships with peers. However, survey questions asking children about their sense of being 'close to others' did not show a change in this area.
- Children were motivated to take part in the project, and enjoyed their time outdoors. However, there was little or no measured change in their overall happiness with their school so experiences as part of the project may not have seeped out into children's school experience as a whole. This is an area that needs investigating further in any future roll-out of the project, and it is worth noting that children began the project

with high levels of school satisfaction making it harder to measure distance travelled. Future evaluations could potentially focus more closely on the links between project motivation and wider social and emotional wellbeing.

Case study data showed that children had different experiences of applying their learning to their own cultural identity or heritage. In two of the four case study schools, children took part in activities that clearly linked knowledge acquired through MSMP to their (and their family's) identities. In these schools, trainers and school leaders felt positive about MSMP's impact on this outcome. In the other two (of four) case study schools, trainers would have benefited from more time to build this element of MSMP into their activities, for example, by accessing the existing training and support provided by LtL, or through opportunities to discuss this element of the project with other trainers. In the two schools where trainers reported difficulties with this aspect of MSMP, children had fewer opportunities to link their learning to their cultural identities or heritage.

The National Lottery Heritage Fund outcomes

Taken together, these findings represent strong evidence that the MSMP pilot was associated with demonstrable benefits across three NLHF outcomes:

- 1 MSMP allowed a diverse group of children to take part in outdoor learning about their local natural heritage. This was particularly important in the context of COVID-19, in which many children, including those from low-income households and those from a wide range of disadvantaged ethnic groups, had spent significant time indoors.
- 2 There were noteworthy shifts in children's wellbeing, across a number of indicators

of physical and social wellbeing, during the project. In particular, MSMP gave young people an opportunity to increase their physical activity levels.

3 Children learnt about their natural heritage during MSMP and were empowered to take action. There were measurable increases in their knowledge of biodiversity, climate change and soils, as well as their sense of empowerment over improving the school grounds. Children were measurably more aware of how their local actions might contribute to wider environmental outcomes. MSMP prompted children and school staff to make more of their local natural heritage.

1.2 Programme delivery

Overall, senior leaders in case study schools were unanimous in their desire to run My School, My Planet and work with Learning through Landscapes in future. Additionally, feedback from case study schools suggested a number of ways that the programme design and delivery had contributed to positive outcomes.

Particularly important features included:

- Effective collaboration between school staff and trainers.
- Visible support from school leadership teams.

Case study schools also highlighted areas for improvement for a future roll-out of My School, My Planet (MSMP). These were:

- The lack of lead in time for the project. The MSMP pilot took place in the context of the COVID-19 emergency. MSMP was granted COVID-19 emergency funding in order to support children's return to school for the 2020/21 academic year. As a result, LtL mobilised resources for the project very quickly. Trainers and senior leaders welcomed MSMP's contribution in this context, but explained how longer lead in times might result in heightened impact in future.
- Elements of the design and administration of evaluation tools. In particular accessing questions from the Connectedness to Nature Scale, Children's version (CTN). Whilst using validated scales such as CTN provides reliability and comparability of survey results, researchers are less able to tailor the language for specific groups. Although researchers selected these measures because they have previously been successfully trialled with similar age groups, trainers and schools reported that children, found it hard to understand certain questions. This was especially, (but not exclusively) problematic in primary schools and with children who had additional learning needs. It is also

worth noting that the CTN measure is not specifically focused on school grounds, however a more specific question was also asked about "Whilst I am at school, I notice nature around me" and the findings from CTN and this more school-focused question were consistent.

- MSMP provided a large number of learning resources that trainers could draw from but there was limited guidance on which to prioritise. Trainers welcomed the quality and breadth of resources but some reported difficulties in selecting a coherent set of teaching materials.
- Trainers working in two of the four case study schools reported difficulties in delivering the cultural identities and heritage element of MSMP. Although LtL made a multi-faceted offer of training and support available to trainers in this area it is a complex dimension of the programme which will require further work as part of any future roll-out.

1.3 Summary of recommendations

We make the following recommendations for any future roll-out of My School, My Planet:

For Learning through Landscapes

- Given the varying degree of success trainers experienced in planning and delivering activities around children's cultural identity and heritage, future iterations of MSMP should clearly set out expectations for trainers in terms of delivering activities connected to this outcome and for accessing training to support delivery. LtL should incorporate additional planning time for trainers on this aspect of the project. Training should also be expanded to include peer-to-peer support during the project, and regular opportunities to test ideas and concepts with peers ahead of delivery.
- LtL should plan "get to know you" sessions for trainers, school staff and the children taking part in MSMP before the project begins.
- As part of "get to know you" sessions, LtL should ensure that trainers and teachers are able to work together to tailor content to children's learning needs.

- LTL should simplify project resources so that trainers have a set of four to five core activities, as well as a wider range of resources to supplement this core.
- LtL should refine the social wellbeing outcome to explore a more specific dimension of wellbeing, potentially around children's relationships with peers, or link measurements of social wellbeing to existing school data on social and emotional learning.
- Ensure that MSMP resources use the same terminology as is used in school curricula in different key stages. Terminology should also match that used in the different devolved nations.
- Several case study schools indicated that they planned to continue elements of the project. LtL and trainers should work with schools during MSMP to identify those elements that might be deliverable by school staff, and offer support to schools in planning how they will continue their chosen elements of MSMP.

For schools taking part in My School, My Planet

- Extend the project to older year groups.
- Ensure teachers and support staff are prepared for the project and that they understand senior leaders' expectations in terms of supporting project delivery.
- In secondary schools, ensure that there is a link member of staff assigned to support the project and provide liaison with the trainer.

For future evaluators of My School, My Planet

- Build in survey pre-testing to ensure accessibility for all children and especially primary age children and those with additional needs. For example, alternative, more child-friendly measures for assessing connection to nature might be trialled.¹ In particular evaluators should consider alternative metrics for connectedness to nature that reflect children's own terms.
- Gather quantitative data from a representative sample of projects (or a sample of children nested within a sample of schools) rather than the full population.
- Plan resourcing to ensure field researchers can collect qualitative data, reducing the administrative burden on trainers and ensuring that a comparable selection of artefacts can be gathered and analysed.

- Introduce more consistent reporting of SEND status – ideally using official categories of need, since terminology was somewhat inconsistent.
- Refine the tools used to measure social wellbeing (or a related outcome on peer relationships) and refine the physical activity measure.
- Review the measure of children's awareness of how their school grounds might contribute to environmental issues and potentially use a more objective knowledge test.
- Further develop the biodiversity knowledge test and make further refinements to knowledge questions.
- Deploy a more structured data input template.
- Plan for a follow up survey after the project has been completed to assess whether impact has been sustained.

Richardson, Miles; Hunt, Anne; Hinds, Joe; Bragg, Rachel; Fido, Dean; Petronzi, Dominic; Barbett, Lea; Clitherow, Theodore; White, Matthew. 2019. "A Measure of Nature Connectedness for Children and Adults: Validation, Performance, and Insights" *Sustainability* 11, no. 12: 3250. <u>https://doi.org/10.3390/su1123250</u>

2 Method

This evaluation of the My School, My Planet pilot is based on both quantitative and qualitative data. Quantitative data was collected through a baseline and endpoint survey. This was administered by trainers.

In addition, Learning through Landscapes (LtL) project staff gathered demographic data about all children taking part in the project. Trainers also gathered qualitative data from their projects. CfEY conducted interviews, provided training for My School, My Planet (MSMP) trainers to support data collection in August 2020, and offered further ad-hoc advice and support for trainers throughout the autumn term 2020.

Qualitative analysis

Qualitative data comprised of four case studies of MSMP projects in schools in each of Scotland, Northern Ireland, Wales and England. The case study schools included two mainstream primary schools, one mainstream secondary school and one special school. In each school, the MSMP trainer collected four 'artefacts' from the project; a floor-chart used for planning and recording activities, children's cultural journey documents, annotated photographs of the structures children built in the school grounds, and recordings of the end-of-project discussion activity, facilitated between the trainer and the participants, held on the final day of the project. These artefacts were intended to provide rich data about children's experiences and to capture these in authentic and valid ways.

Additionally, CfEY conducted semi-structured phone interviews with the trainer and a member of the school's senior leadership team in each case study school in order to explore their perceptions of any changes across the project outcomes and to probe the factors that might have led to any change. Interviews were recorded and transcribed.

Data from the four schools was coded across the eight outcomes listed below, with additional codes for one further project outcome (Children relate understanding about project themes to individual experiences of culture, cultural heritage and identity). Transcripts were also coded for unexpected impact, and views on project delivery.

Quantitative analysis

CfEY designed the survey to provide a range of measures for the programme's intended outcomes, drawing on validated measures where feasible. The use of validated measures was intended to build on the existing evidence base and previous field-testing (given the lack of available time for field testing) and to maximise the reliability and validity of the measures. 662 usable matched responses were gathered. This represents a high response rate, of approximately 62% which lends some confidence to the conclusions, although it is worth noting that those who did respond may not be representative of the cohort as a whole and that responses to individual survey questions were sometimes slightly, but not much smaller. Question level response numbers are provided throughout the report.

Outcome	Measure/question	Source	
Wider group of children are involved in learning about nature in school grounds	Young person gender, SEND status, Bedrooms per person, Ethnicity, age	Programme data	
	Overall life satisfaction	The Children's Society	0
Social Wellbeing	Short Edinburgh Warwick Mental Well-Being Scale (SWEMBWBS)	<u>Child Outcomes Research</u> <u>Consortium</u>	0
School Motivation	Happiness with school	The Children's Society	Ø
Engagement and empowerment to enact	Enough spaces for me to play or have a good time	New measure	
physical changes in school grounds	Nothing I do will change the natural environment at my school	New measure	
Engagement in issues relating to local environment and natural heritage	I am very aware that my school grounds might contribute to environmental problems	New measure	
Connection to the outdoor	Connectedness to Nature Scale, Children's version (CTN)	North American Association for Environmental Education	Ø
environment and nature	Whilst I am at school, I notice nature around me	New measure	
Improved Physical Activity	In the last 7 days, how often have you been very active	New measure	
	Concise Physical Activity Questionnaire (adapted version)	Adapted from <u>American</u> <u>Psychological Association</u>	0
Topic knowledge	Three knowledge tests based on programme content	New measures	

Children completed surveys on paper and all data was manually entered into three separate school spreadsheets (baseline, endpoint and demographics.) Analysis involved extensive data cleansing and matching of the three datasets per school. These were combined into one master spreadsheet using unique identifiers. Where survey measures were based on validated scales (or adaptations thereof), they were analysed in line with the available guidance. Further analysis involved calculating average pre– and post– scores, comparing distributions of scores, and a metric indicating the proportion of children whose scores had increased or decreased by more than a threshold (one point on a Likert scale or 0.5 standard deviations for scale measures).

Limitations

Both the qualitative and the quantitative data collection was administered by LtL trainers, sometimes in the presence of school staff (for example in the case of the pre-survey). This may have impacted on the validity of both datasets, with children's responses potentially influenced by their perceptions of how trainers or school staff might want them to respond. Artefacts representing children's activity on the project were also chosen by trainers themselves. On one hand this allowed trainers to select artefacts which they felt represented the activities children had engaged in and their experiences of the programme, but on the other, this impacts on the findings' independence.

Trainers found it difficult to administer paper-based surveys. This was due to a number of factors:

- A lack of time to complete the pre-survey during the initial 'consultation day'.
- The reading level required to access the surveys, which in particular, excluded children with additional learning needs or special educational needs, and those in younger age groups.
- Logistical difficulties of completing paperbased surveys in the outdoors.

These difficulties reduced the sample size for the survey, such that these findings are based on data from approximately two thirds of participants. The sample size for the survey data was also impacted by a number of schools being unable to gain parental consent for the evaluation, and other schools being unable to gather post–survey data within the timescale for the evaluation.

Trainers reported specific problems for children in accessing some questions in the CTN survey. However, the use of a second "Whilst I am at school, I notice nature around me" measure affords an opportunity to crosscheck findings and the response rate to both was similar. Difficulties with accessibility may have led to lower response rates for some questions or made it harder for children to answer accurately.

As noted above, because of difficulties accessing some questions, relating to certain outcomes, the evaluation findings may not be representative of all children who took part in MSMP. These concerns are discussed in more detail in Section 4.10.

In order to support trainers to collect quantitative and qualitative data in a consistent manner, trainers participated in a training session led by a senior researcher from CfEY. They were also able to access a masterclass and online Q&A on the evaluation. This training explained data collection processes as well as providing an introduction to good practice in survey administration and interview technique. This training was intended to increase the reliability of the data that was gathered, and thus the validity of findings.

This evaluation involves pre- and post- measures to explore whether the programme is associated with change in a range of outcomes. It also uses qualitative data to explore whether participants, teachers and programme staff link children's experiences on the programme to these (and other) changes. It therefore takes the form of an empirical enquiry with some elements of a control group study in relation to the "knowledge" outcome. Only limited claims can therefore be made in relation to causality because whilst qualitative data indicates a number of 'plausible causal pathways' that link changes to activities, this cannot be evidenced through comparison to a control group.

Focus area case study: Craigmarloch School

3.1 Introduction to Craigmarloch

Craigmarloch School is a school catering for children with complex additional support needs, located in Port Glasgow (Inverclyde), Scotland. It includes nursery, primary and secondary provision, with children aged from 5 to 19. The My School, My Planet project worked with secondary children in S1 to S2 who were aged between 11 and 13.

This case study explores My School, My Planet's (MSMP) impact on the children taking part, based on:

- Interviews with the headteacher and MSMP trainer
- A selection of artefacts from the projects, consisting of:
 - photographs of activities
 - three video clips of discussions with children
 - an email sent to the school by the trainer about a child who took part
 - images of feedback and comments from children.

This case study summarises the project's impact and key learning about programme delivery.

The headteacher described the importance of children spending time outdoors as part of the recovery process following a lockdown, which had been in place throughout Scotland for much of 2020. Many of the children had not been able to leave their houses during that time, which they found very challenging. This context informed the headteacher's decision to take part in MSMP, with a desire to promote outdoor learning for children.

3.2

Connecting with nature, improving understanding

"It's so good to be doing something for the environment...it's fun...and something new and different..."

Child, Craigmarloch

From interviews, it seemed MSMP had contributed to some notable changes in how children viewed nature. In one activity, the MSMP trainer helped children build their own shelter in the school grounds. As the trainer recalled, they cleared piles of fallen leaves to create space and used a variety of materials to make their shelters (photographs below). The trainer explained that using natural materials and putting out bird feeders had helped children to start paying closer notice of nature and helped them welcome new wildlife to their school.

"They're using branches, they're using twigs, they're planting dead hedges to create the shelter... they're taking note of everything that's around them now. The leaves that are falling, they would not have noticed them before... They're just aware of what's going on. The birds that are coming in, they're now aware that there's birds coming in because they put bird feeders out"

MSMP trainer, Craigmarloch

In another activity, children worked with the trainer to revitalise and replant a raised bed, which they filled with herbs. The trainer taught children how to transplant the herbs into the bed and how to look after them. Both trainer and headteacher felt this had helped the children develop a stronger connection with nature. The headteacher explained that children would revisit beds to check how the herbs were growing, talk about what they had planted and discuss how the various plants could be used in cooking. In doing so, they displayed an ability to connect what they eat to nature.

"And to have kids come into my office with a plant of herbs and saying 'Look at this. Do you know what this is? We grew this, or we can grow this. You can put that in your fruit, or you can put that in your sauce' or something like that. So, that sort of awareness has improved."

Senior leader, Craigmarloch

This understanding of the link between the natural world and the food children ate was further reinforced by:

- Children planting vegetables and then using them to make soup or a stew in home economics.
- The trainer bringing children some bramble jelly to try.



Children building a shelter with adult supervision

Natural material collected by children to build shelters



Focus area case study: Craigmarloch School

3.3

Applying new knowledge

There were also a number of improvements in children's knowledge. The trainer noted that children's application of their learning about soil to other outdoor activities, such as digging and growing food, may have helped to reinforce their knowledge about soil.

"[Children were] using an outdoor space to improve... their knowledge about the soil, and their knowledge about growing, and their knowledge about what they could grow and cook in [the soil]." Whilst the examples above suggest notable improvements to children's learning in some areas, MSMP's ambitious goal for students to link their project learning to issues of culture and identity presented some challenges. Both felt that students' additional needs made this outcome hard to achieve. One way of combatting this may have been to provide the trainer with additional resources that were more tailored to students' needs.



3.4 Getting outdoors, working together

MSMP gave children opportunities to spend time outdoors with their peers and this had a number of reported benefits. The trainer felt that children had enjoyed the physical element of the work, with children wanting to participate regardless of the weather. She also observed improvements in children's ability to work together on physical tasks, which they did with a great degree of enthusiasm.

"Their teamwork and working together on a physical activity was really good as well. So yeah, it did improve drastically... It didn't matter what the weather was like, they were up for it. They wanted to go on with it. And there were literally like spring lambs and they were leaping into the garden."

MSMP trainer, Craigmarloch

Children themselves seemed to relish the physical nature of the activities they had completed, with some recalling how they had persevered through physical challenges.

"[Making the Nessie bed] was hard work but worth it... awesome...beautiful...brill... good... [I] feel proud"

Child, Craigmarloch

Children's relationships with their peers developed over the course of Craigmarloch's involvement with MSMP. The trainer noted how, after some initial difficulties, children improved their eye contact with her and enjoyed speaking about their work with peers. As captured in the child's remark above, the trainer observed a rise in children's confidence and self–esteem as they were able to do things that they had not tried before and did not expect to excel at. Children reportedly displayed a sense of pride in their achievements and enjoyed seeing the reactions of their teachers when they noticed what they had been doing.

"It made the pupils quite proud of what they were doing and that the management staff were out and taking notice and they were commenting and liking, so it encouraged them. It built the confidence and self-esteem, and it felt more like it was a whole school approach."

MSMP trainer, Craigmarloch

Focus area case study: Craigmarloch School

3.5

Taking ownership of school grounds

At the start of the project, children demonstrated limited engagement with the school site. They were conscious of the large tarmac play area but less aware of areas covered in grass and bushes, which were occasionally maintained by local authority gardeners. Over the course of the project, the headteacher reported children seeing the school grounds as somewhere to learn. Having built a dam and some shelters, they now actively chose to spend time in those areas. In addition, children made a trail leading to a quiet area within the school grounds, which is now being used by groups of children who want to have some time out and enjoy some peace. Having benefited from MSMP guidance, students were keen to make better use of their school grounds, as the headteacher noted.

"The school grounds at break time are a very different place. I see the kids actively making use of the stuff that they've put in place through My School, My Planet, not necessarily under adult direction. Just off their own back, through their own social time. They're making use of these things, so that's been really pleasing."

Senior leader, Craigmarloch

3.6 A lasting legacy

Children at Craigmarloch reportedly enjoyed school before MSMP. That said, the headteacher felt they "looked forward" to each MSMP session and to getting outside again. The headteacher was determined for MSMP to produce a lasting legacy in the school, sustaining impact beyond the project's end. He hopes to retain some elements of MSMP throughout the school year and was committed to fostering a further engagement with nature and awareness of the environment by celebrating students' work and achievements. The headteacher also wanted the project to lead to an increase in the physical activities available to children. He commented that the children were excited to see the change in the seasons and to see what that would do to their outdoor space, and that this would motivate them to keep going outside after MSMP ended.

"They can't wait for the snow because they can't wait to see what the garden is going to look like in the snow. So again, there'll be a desire in the children to get out to the garden area that they've created. How's the den going to hold up in the snow? So, that's all going to lead to an increase in the physical activity. And the important thing for us is that it was a legacy from this. You know, that it was a lasting understanding and desire from the children to be outside."

Senior leader, Craigmarloch

Focus area case study: Craigmarloch School

3.7

Project delivery

A number of aspects of the way the project was delivered played an important role in securing the positive outcomes noted above. Firstly, there was effective communication both before and during the project. Prior to MSMP, the trainer ran an introductory session with school staff in S1 and S2, to establish rapport with other members of staff and adapt activities to meet children's additional needs. The trainer felt Learning Through Landscapes had done a "marvellous job of sending out information to the school", which helped them make a productive start to the project. The headteacher reported that staff were grateful for the extensive briefing information that they had received, which helped them prepare for the start of the project. He added that staff were "right behind" MSMP and had bought in to the idea that the project was worthwhile.

The trainer felt it was important to make MSMP as hands-on as possible, to help students access the project from the very start. She encouraged children to get their hands dirty and to work with moss and soil, which children enjoyed. In addition, the trainer showed children how to split plants and plant them out, how to tie them up with twine and string, and how to water them: everything was designed to be as practical as possible. The trainer also used a lot of their own activities to complement what was provided within the MSMP outline, including material that came from the Royal Horticultural Society's campaign for skilled gardening activities. Notwithstanding these efforts, the trainer felt that some barriers to access did remain, particularly for students using wheelchairs and those with the most complex learning needs. For example, she felt that some of the language used in project activities and survey questions was too challenging for some of the children to engage with. Great efforts were made to improve student access to MSMP, though there may be scope to adapt resources and practices further, to help future projects be even more inclusive. These additional adjustments could ensure all children can fully participate in project activities and benefit from MSMP.

4 Findings

4.1

A wider group of children are involved in learning about nature in school grounds

My School, My Planet led to a wider group of children getting involved in learning outside, in the school grounds. Participant data confirms that a wide range of children were involved in the project and that many came from the socioeconomically disadvantaged backgrounds or disadvantaged ethnic groups that Learning through Landscapes intended to take part.



Findings

White Scottish / English/ Welsh / Northern Irish/ British	311	White – Polish	6	Other – Other	1
White Scottish	42	Arab	6	Refused	1
Any other white background	39	Black / Black British Caribbean	6	Other Asian	1
Asian / Asian British Indian	35	White and Black Caribbean	5	Sri Lankan Tamil	1
Asian / Asian British Pakistani	27	Asian / Asian British Bangladeshi	4	Black Caribbean	1
Any other Asian background	20	Any other multiple background	3	Traveller of Irish heritage	1
White Welsh	18	White and Black African	3	White Eastern European	1
White Brtitish	16	African - Other	3	Caribbean or Black - Other	1
Bangladeshi	16	White – Other	3	White European	1
Black / Black British African	12	Pakistani	2	Asian - Other	1
Indian	12	Not known	2	White Other	1
Any other Black / African / Caribbean background	12	Other Ethnic Group	2	Asian – Pakistani / British / Scottish	1
Black – Somali	8	Any other Black background	2	Asian - Indian / British / Scottish	1
Any other ethnic group	8	Information withheld	2	Any other mixed background	1
White Gypsy / Irish traveller	7	Other Black African	1	Asian / Asian British Chinese	1
White and Asian	6	White English	1	Mixed or multiple ethnic groups	1

Children's backgrounds

Participants' ranged in age from 6 to 13 years old and averaged 9.2 years of age. Boys were slightly over-represented making up nearly 54% of participants. Learning through Landscapes (LtL) should work closely with schools in the future to ensure a gender balance in any future iteration of the project.

Teachers reported a special educational need or disability (SEND) for 16% of participants which is in line with national averages. SEND status was left blank for many participants and this may therefore underestimate the proportion that in fact had a special education need or disability. Reporting of SEND status was somewhat inconsistent and in future it would therefore be worth simplifying how SEND status is recorded, ideally using official established categories.

Children came from a wide range of ethnic backgrounds with 47 different descriptions

recorded. 40% of participants came from backgrounds other than the three backgrounds most frequently reported, which were White Scottish/English/Welsh/Northern Irish/British; White Scottish; and Any other white background.

Many participants came from socioeconomically disadvantaged households. Over a third were identified as being eligible for Free School Meals – double the national average. Moreover, excluding blank responses, the proportion was nearer 50%. It is not possible to identify which children lived in overcrowded households using the official benchmark² but three-quarters (of those for whom data was available) lived in homes where individuals shared rooms, and 6% lived in households where there were more than two people per bedroom.

Key findings

- A wide range of children participated in MSMP.
- Many came from socioeconomically disadvantaged backgrounds, with between a third and half identified as being eligible for Free School Meals (FSM). This is considerably more than the national average.
- Nearly half (40%) of children taking part in MSMP came from ethnic groups other than the three backgrounds most frequently reported. However, because the decision was made to allow people to

self-describe rather than to use categories used in official datasets, this cannot be reliably compared to national averages.

- The proportion of children with a special educational need or disability (SEND/ ASN) taking part in MSMP was in line with national averages though incomplete data means this may be an underestimate.
- There is some evidence that girls may have been under-represented amongst participants and this will need close monitoring and attention in future.

² https://england.shelter.org.uk/housing_advice/repairs/check_if_your_home_is_overcrowded_by_law

4.2 Children's connection to nature

Overall, our findings present a promising, but mixed picture of impact on whether My School, My Planet contributed to children feeling more connected to nature. Case studies provide evidence of positive changes in this outcome, and although these changes are not reflected across survey data from the full cohort of children taking part, there is some evidence that for children with lower levels of connectedness to nature at the start of the project, there was a measurable positive change over the course of the project.

"They're actually taking notice of the space and the outdoors ... Their school garden, their school grounds. They're taking notice right away."

MSMP trainer, School 2

The four case studies suggest that taking part in the project helped children connect with nature, often from what trainers and senior leaders perceived as a low starting point. There was a consensus across all four case study schools that, prior to the project, children had limited connection to nature. Many were unaware of local opportunities to observe wildlife, take walks and other ways of engaging with nature. These concerns were exacerbated by COVID-19, which had curtailed opportunities for children to engage with the outside world. In School 1, for instance, of the 29 children taking part, only five reported going outside most days during the six months they were off school.

Both children and the adults who work with them reported concrete examples of shifts in attitudes towards nature over the course of the programme, and these are consistent with the quantitative findings below showing sizeable changes among a subgroup of participants. In School 1, the senior leader felt that children were embracing nature and were no longer afraid to get dirty and to play in environments full of invertebrates:

"We went from week one where we were afraid of getting dirty, to now quite relishing in rolling in the mud...So many children had never even touched a worm before, let alone put it in their hands. And [it was] quite amazing to see there were definitely children there that have never gotten dirty before and had dirt under their nails."



In their feedback, children across all case studies confirmed that they loved spending time outdoors, enjoying the fresh air:



One began My School, My Planet (MSMP) saying she was "not interested in nature", but three weeks later, the headteacher told us that she was "digging for worms and creating homes and safe spaces for them".

The case studies revealed a number of specific ways children connected to nature:

- Understanding the links between the natural world and food: In School 2, children were taught how to transplant herbs into a raised bed and how to look after them.
- Building dens or shelters: In School 2, the trainer explained that children had engaged with natural features within the school grounds whilst building shelters.
- Linking experiential learning with knowledge-based learning: In School 1 children filled dens with secondhand nature books. This gave children opportunities to read and research outside the school building.

There is some evidence that the programme's potential impact on children's connection to nature will be sustained in the future; across all case studies trainers and school leaders believed that MSMP would leave a legacy, both in school and beyond the school gates. In School 3 for example, the senior leader stated that MSMP had been a catalyst for the school to think about visiting natural sites in their local areas. As a result, the senior leader expected children to continue spending more time outside. Across the case studies, children valued the tangible impact they were able to make on their school grounds and local surroundings.





Children enjoying time in the den they built: School 2 This child was able to explain how to transplant the herbs and could identify every one by sight and scent

Alongside the positive stories of change noted in the case studies, on both survey measures used to assess changes in children's nature connection, scores were considerably more likely to increase than decrease. Changes across the full sample in children's measured connection with the outdoor environment and nature were marginal (the change in CTN score is equivalent to less than 0.1 standard deviations which is negligible). However, the survey data does suggest some positive change for a key sub-group of children: Children who began the programme strongly disagreeing with the statement "Whilst I'm at school I notice nature around me" went on to report the biggest change in CTN (0.6 points, equivalent to ~half a standard deviation).



Though the sample sizes on this subgroup level analysis are small, it provides some indication that children with a weaker connection to nature experienced the biggest increases over the course of the programme. On the other hand, given that ~80% of children already agreed or strongly agreed that they noticed nature at school at the start of the programme (and that there was little impact on CTN score among these children), it is not surprising that there was limited measured change overall. As discussed in Section 2, there were also some reported difficulties in accessing questions on the Connection to Nature (CTN) scale. Despite this, children's scores on CTN were consistent with those on the more simply phrased "Whilst I am at school, I notice nature around me" measure. This suggests that lack of measured impact on the CTN scale was not due to difficulty with question interpretation or comprehension, but instead a result of high self-rated scores at the outset of MSMP.

Children's connection with the outdoors and nature



Baseline average **4.1**

Endpoint average **4.2**





Given children's high self-rated CTN scores at the start of the project, it may be worth exploring individual children's connection to nature in further detail at the start of the programme. This would be of particular importance given that existing research suggests children who are thought to have a low connection to nature may in fact connect to it in unexpected ways, as Dr Jo Birch explains in a recent article: "If you're under 30, living in a city in the UK, and especially if you're in an ethnic minority group, you're likely to be considered less connected to nature or an "infrequent nature user" in academic research. This characterisation has consequences – if you fit this description, your voice is heard much less in debates about nature, conservation and wildlife than your wealthier or, if you're a person of colour, white peers. But throughout my own research, I've found that children in cities tend to value nature more than others realise."³

Dr Jo Birch

Summary of findings

- Case study data revealed that children connected to nature in a number of ways during the project.
- Although there was little, if any, change in children's average measured connection to nature at a cohort level, there was some evidence of a greater shift amongst children who began their involvement with a low level of connection to nature.
- Future evaluators should explore children's connection to nature in their own terms through qualitative research at the start and during the project.

³ https://theconversation.com/nature-doesnt-judge-you-how-young-people-in-cities-feel-about-thenatural-world-148848

Children's engagement with issues about their local environment and natural heritage

Children's engagement with issues about their local environment and natural heritage increased during My School, My Planet. Their awareness of how their school grounds linked to environmental problems increased over the course of the project.

Case studies provided examples of children's growing feeling of agency over the local environment. They also demonstrated some of the changes children made to their school grounds to improve the wider environment, as well as examples of children's changing use of school grounds.

"I want people to start recycling more and to stop cutting down trees, and I think we can help by recycling more in our school as well."

Child, School 1

Interview data demonstrates that prior to the project, children's attitudes towards the environment were described as ranging from disinterested, to "nihilistic", with one trainer reporting that children told her that they felt they had no agency in preventing environmental catastrophe.

By the end of the project, children in all case study schools were able to take ownership of their local environment and connect this with broader environmental issues, such as climate change.

In each case study, children demonstrated increases in their awareness of the links between their own actions and environmental outcomes:

- In School 2: both the trainer and headteacher reported the children's development of a sense of responsibility towards the environment. For example, they were observed discussing the environmental importance of plants and their learning about gardening in ecologically friendly ways with their parents at the school gate.
- In School 3: children discussed environmental issues with the trainer, and set out how they hoped to make a difference:
- "I will recycle as much as I can, plant flowers and other plants and get a hedgehog house for my garden"
- "To make a difference, I will help plant more trees and use less petrol cars"

Children, School 3

 In all four case studies: Children made environmental pledges such as wasting less food, planting trees, flowers and bulbs, and looking after animals. One young person in School 3, who was described as being disengaged in the project initially, pledged to make signs to encourage children and staff at the school to protect what they had planted in the garden as part of My School, My Planet (MSMP). Across the case studies, children had begun to make connections between the local and the global. In their end-of-project reflections, children in School 1 spoke of planting more trees so there would be more oxygen, saving animals from bushfires and stopping climate change; thus demonstrating that they had made connections between local and global environmental issues:

"I want to plant more trees so it can stop carbon dioxide, so the world has more oxygen and stops cutting down trees"

"I want people to plant more stuff and save more animals from bushfires..."

"I want to stop climate change and I want to stop...there being wild-fires and I want trees to live longer lives."

"I want people to start recycling more and to stop cutting down trees, and I think we can help by recycling more in our school as well."

Children, School 1

Case study schools were committed to maintaining children's environmental commitments after MSMP. For example, in School 3, children's eagerness to engage with their local area led the headteacher to consider how further ties to local environmental community groups could be made across their curriculum. They had also become a plastic– free school, with children taking opportunities to further their learning during MSMP:

"What we're doing on the back of this [MSMP] that's linked is that we're trying to become a plastic free school.... All the year sevens now are slowly, as a reward, having aluminium bottles in assemblies... we're making those links really with My School, My Planet. Well, it is a global issue, isn't it, plastic."

School leader, School 3

Although there was evidence of positive changes in children's attitudes to the environment in all four case studies, one trainer believed that MSMP could have gone further to introduce wider environmental issues to children. They felt that the project was trying "to do too much in too short a space of time". This trainer described a tension between completing the physical construction elements of the project and allowing children to explore the aspects of topics that interested them most.

Furthermore, the language used by MSMP around topics did not always match the language used in school curricula. In School 3 the trainer reported that children had been studying "habitat" in the Key Stage 3 curriculum, and that she believed children made more progress once she started using terminology children were familiar with.

The changes noted in the case studies above were reflected in the large-scale data gathered through the survey. By the end of the programme, a quarter of children strongly agreed that they were very aware of how their school grounds might contribute to environmental problems compared to only 17% at the start. 40% of children reported an increase in their awareness and this is consistent with findings reported later in this report regarding children's empowerment in relation to making changes in their school grounds, their sense of being useful and their knowledge of the environment. It is worth noting that self-assessing awareness requires children to know what it would be like to be 'very aware' or 'not very aware' and this measure therefore has notable limitations. It may therefore be worth reviewing this measure in future and potentially using a more objective knowledge test.

Children's feelings of engagement in issues about their local environment and natural heritage



Summary of findings

- There was compelling evidence of a shift in children's understanding of how their local actions can have a wider environmental impact during MSMP.
- The project gave children an opportunity to demonstrate their engagement with issues impacting on their local environment and natural heritage, particularly in their school grounds.
- MSMP could go further to prioritise children's knowledge of environmental issues, and deepen their understanding of the links between their school grounds and the wider environment.

4.4

Children's knowledge on three topic areas: climate change, biodiversity and soils for growing.

Children's knowledge of biodiversity, climate change and soil science increased over the course of the My School, My Planet pilot and case studies revealed that one of the project's strengths was that it allowed children to make links between the three topic areas.

"Children selected biodiversity as their preferred topic... They're all quite ecoconscious, but it gave a real face to that. There are real live creatures here that live here on our school, in our gardens, under the ground, in the trees. They even got to experience planting plants and then having them all ripped up by foxes overnight. There's actually that kind of awareness that there's more than just humans here in this space was a key focus in all the activities they did."

Senior leader: School 1

"Their knowledge was starting from a baseline of really zero... their knowledge about their soil, and their knowledge about growing, and their knowledge about what they could grow and cook in [the school grounds]"

MSMP trainer: School 2

The three topic areas were not discrete or mutually exclusive. Most children in the case study schools took part in activities and discussions that encompassed climate change, biodiversity and soils. The exception to this was in School 2, where children's Additional Support Needs (ASN) meant that the trainer decided to focus mainly on one topic (soil). In that school, the trainer suggested that children had started with "zero knowledge" but that through digging and planting activities, alongside discussion of soil erosion and testing of soil shape and texture, their knowledge improved.

Children's reflections on their learning presented a mixed picture of impact. On the one hand, the artefacts we gathered from case study schools showed evidence that children had considered all three topic areas, (as children from School 3's mind-maps on climate change and biodiversity show). In School 4, children's interest in mushrooms enabled several concepts to be linked, including learning about the lifecycle of fungi and their contribution to soils, soil types, and the differences in the role of photosynthesis for plants and fungi.





Children's mindmaps on biodiversity: School 3

On the other hand, the case study artefacts suggested that on occasions, children's knowledge lacked depth – something which could not be tested in the very brief and limited survey questions. For example, in one school, a child's end of project reflection referred to biodiversity as 'plants and animals' whilst three others suggested ending coronavirus as a way of improving biodiversity. School 3's trainer felt children's learning about the topics may have been limited by the language used in the activities. They argued that discussion of 'biodiversity' was difficult for example, as children lacked prior knowledge of the term. Furthermore, Year 7s had only recently joined the school, after six months of missed schooling due to COVID-19. It may therefore have been useful for the trainer to have had more substantive conversations with children about their prior knowledge, and for the trainer to speak to subject teachers so they could link My School, My Planet (MSMP) content to the school's schemes of work better.

Senior leaders and trainers were sometimes uncertain about the extent to which children developed their knowledge during MSMP. One trainer commented that they had made an active decision not to concentrate on children's knowledge acquisition, and instead to focus on tangible actions in the school grounds: "I had a chat with [LtL central team] about it... We did talk a little bit about biodiversity loss and what we were going to do, but we focused on how we could change things, ... so that our school, at least, is somewhere that increases biodiversity"

MSMP trainer, School 1

On the other hand, the senior leader in the same school suggested that students were increasingly excited to identify birds and appreciate the 'biodiversity right here underneath your feet' (School 1).

Despite the reservations that trainers and school leaders expressed in interviews, pre- and post-programme knowledge tests revealed considerable increases in children's knowledge in all three areas. Comparing changes in children's knowledge on different topics depending on which topic they focused on could have provided a form of control group, allowing for some testing of causality but the potential for this approach is limited by the fact that children actually covered a mixture of topics regardless of which was selected as the focus so the different groups did not in fact provide a control group. Thus, with the exception of soil science (where the content was more discrete), increases in knowledge were similar regardless of the selected topic.



Example of children's work on fungi: School 4

Children's knowledge of key topics



Summary of findings

- Children gained considerable new knowledge in relation to three environmentally focused topics over the course of the project.
- Case studies suggest that MSMP supported children to make links between climate change, biodiversity and soils.
- MSMP could go further to improve the depth of children's knowledge, by prioritising this aspect of the project and linking MSMP content and resources more closely to school curricula.

Children's physical activity

My School, My Planet gave children a timely opportunity to take part in vigorous physical activity. Case studies emphasised the importance of the project in giving children physical outdoor tasks in the context of COVID-19. This was reflected in small increases in children's measured physical activity levels.

"My neck was killing me when I was digging, but I enjoyed it."

"[Making the Nessie bed] was hard work but worth it...[it was] awesome...beautiful... brill... good... [and has made me] feel proud"

Children, School 2

Whilst it is important to note that a number of factors relating to the national and local COVID-19 context will likely have played a role in children's activity levels, across all case study schools, children, trainers and school leaders commented on My School, My Planet's (MSMP) positive impact in this area, something which was considered very important given children's limited physical activity in preceding months.

"We're in the midst of a global pandemic and the physical activity in just getting outside and then the moving and planting and all the exercise that they did, the children are on a physical literacy app where they clock up their exercise and their time outside... Just the fresh air, experience of being out, the moving around, the trying of equipment, the using of equipment. Children couldn't believe how much energy they were expanding within that and how good that felt just being outside."

Senior leader, School 4

MSMP gave children opportunities to undertake physical tasks, such as shovelling soil, making raised beds (School 3), using tools, and digging (School 2). Many of these were new skills for them. In School 1, for instance, the trainer reported children covering several miles a day, whilst the senior leader noted ties between physical and mental health, both of which they believed had improved as a result of extensive time spent outside. In School 4, the senior leader referenced concerns about diabetes and obesity amongst children and reported that MSMP had precipitated shifts in children's attitudes to physical activity:

"There are a number of children who really gained significantly in their activity and their attitude to actually getting outside and moving, which was huge."

Senior leader, School 4

Case studies also demonstrated the connection between physical activity and spending time outdoors. In School 3, children were able to enjoy nature and get fit at the same time. These benefits were acknowledged in School 2, where the senior leader hoped that an increase in outdoor physical activity would be part of MSMP's legacy. They reported that children were keen to experience seasonal changes over the forthcoming year and see how these changes might affect their outdoor space. Likewise, in School 4, the senior leader said that they had begun to take children on local nature walks



Daisy was more puttin excuse in class we just sit on chuir in our poor corning we nu around and

Children celebrate the physical activities that form such a significant part of MSMP: School 1 Children engaging in activities outdoors as part of the project: School 2



as a result of seeing positive changes among children taking part in MSMP. This suggests that MSMP may have had positive spill-over benefits beyond its direct beneficiaries.

Children reportedly found the physical activities challenging but enjoyable and rewarding. Children's reflections referenced heightened activity levels when contrasting their experiences on MSMP with 'business as usual' learning. As demonstrated in the photograph below, several children referenced the sedentary nature of classroom activity compared to the "more active" nature of learning on MSMP. The trainer at School 2 praised children's attitudes, particularly their resilience in the face of bad weather and their improved ability to work together on physical tasks.

"It didn't matter what the weather was like, they were up for it. They wanted to go on with it. And there were literally like spring lambs. They were leaping into the garden."

MSMP trainer, School 2

Further spill-over benefits were also reported at School 1 in relation to healthy eating; the trainer noted that that children had developed bigger appetites, prompting her and the school to arrange a fruit box delivery, providing healthy snacks for the children.

The above reported changes in physical activity are also discernible within the quantitative survey data. Although there were some difficulties using and analysing the modified Concise Physical Activity Questionnaire, the findings on change are broadly consistent across both survey measures and the increase in average activity levels on the CPAQa measure was equivalent to 0.23 standard deviations. Additionally, on both measures, children were much more likely to increase than reduce their activity levels.

Physical activity



Increased Decreased Same

Individual changes



Physical activity levels (CPAQa), pre and post n=432







Summary of findings

- Children gained considerable new • knowledge in relation to three environmentally focused topics over the course of the project.
- Case studies suggest that MSMP supported children to make links between climate change, biodiversity and soils.
- MSMP could go further to improve • the depth of children's knowledge, by prioritising this aspect of the project and linking MSMP content and resources more closely to school curricula.

4.6 Children's social wellbeing

Case studies suggested some positive changes with regard to children's relationships with peers. However, there was little change in average levels of children's wellbeing at a cohort level and although many individual children's wellbeing levels changed, this sometimes increased and sometimes decreased and on one measure, the proportion whose scores increased was similar to the proportion whose score decreased.

"What we saw was that they eventually were choosing to work with children who weren't their friends, who were children that were not known to them. And we saw new friendships being formed, which was really lovely."

Senior leader, School 1

Across the four case studies, interviewees said the project had given children opportunities to work together towards shared goals, with some promising results. In School 1, for instance, the senior leader noted that as the project developed, children often chose to work with peers whom they were not necessarily friends with, thus forming new friendships. This was corroborated by the trainer, who commented on the opportunities My School, My Planet (MSMP) provided for children to get to know their friends by playing outside. Across the case studies, children themselves reflected on how much they enjoyed the opportunity the programme offered to spend time with their friends:

"[the most fun I had was] laying down with my friends, chilling with my friends..."

Child, School 1

There were also reports that children's behaviour and social interactions had considerably improved over the course of the project. One senior leader at School 1 gave an example saying that during the first week of outdoor learning:

"There was a lot of fighting, a lot of misbehaving, and I think our behaviour has got much better."

Senior leader, School 1

MSMP created opportunities for children to develop social confidence. For example, at School 3 one young person began the project very quiet, and ended the project making suggestions to her peers about how they might plant the garden. These trends were also seen at the whole–class level, with the School 3 trainer recalling an activity in which children bravely talked to the whole class and other school staff. Meanwhile in School 2, the trainer believed that children had been validated by senior leaders' interest in their MSMP work:

"It made the pupils quite proud of what they were doing and that the management staff were out and taking notice and they were commenting and liking, so it encouraged them. It built their confidence and self-esteem, and it felt more like it was a whole school approach."

MSMP trainer, School 2



Children making presentations about their work to various audiences: School 3 A number of other benefits for children's wellbeing were reported including:

- Increasing children's appetite for healthy risk-taking (School 1).
- Creating a supportive environment for children with additional needs to build relationships and improve their confidence (School 2).
- Helping children feel settled in year 7 (School 3).

In terms of the overall life satisfaction measure, average scores across participants fell very marginally between baseline and endpoint and the proportion of children whose scores increased was similar to the proportion whose score decreased. However, this survey measure is of limited value given that over 40% of children already rated their life satisfaction at 10 out of 10 at baseline, and over 50% rated it 9–10,⁴ a distribution which makes it very hard to measure distance travelled at endpoint. These high levels of wellbeing are at odds with the much lower levels found using the second measure, which was based on the widely used and well validated Short Warwick Edinburgh Mental Wellbeing Scale (SWEMWBS).⁵

The average score on the SWEMWBS measure increased very slightly between baseline and endpoint but this change was only equivalent to 0.13 of a standard deviation so is very small. On the other hand, the proportion of children with low mental wellbeing fell by 5 percentage points and children's scores were considerably more likely to increase than decrease.⁶

Exploring children's responses to individual questions on the SWEMWBS measure shows that scores on certain specific dimensions increased, most notably feeling 'useful', where there was an increase of 0.29 which is equivalent to approximately ~0.2 standard deviations.

4 For comparison ONS data for 10–17 year olds (an older age group) from April–June 2020 shows an average score of 7.2 (cf. 7.9 for MSMP) with 8.5% scoring below 5 (compared to 11% for MSMP). Of course, the ONS' largely adolescent cohort differs considerably to the much younger cohort who participated in MSMP. www.childrenssociety.org.uk/sites/default/files/2020-11/Good-Childhood-Report-2020.pdf

⁵ The Short Warwick-Edinburgh Mental Wellbeing Scale (or SWEMWBS) is widely used in international and UK studies of children's mental health.

⁶ Note that SWEMWBS was not originally designed for individual level use, though it has been used this way. https://warwick.ac.uk/fac/sci/med/research/platform/wemwbs/using/howto/

Children's social wellbeing



Mental well-being SWEMWBS n=398

SWEMWBS

components



Whilst the survey data presented a mixed picture regarding changes to children's social wellbeing, the case studies suggest that MSMP positively impacted on specific areas, particularly in terms of relationships with peers. These were not specifically explored in the survey so it is impossible

Individual changes



≥0.5 SD increase ≥0.5 SD decrease Within ±0.5 SD



to corroborate this at scale, though one question on the SWEMWBS scale refers to 'closeness to others' so could provide an imperfect proxy. However, there was no measured change in baseline and endpoint scores on this measure.



My School, My Planet

Summary of findings

- Case study data suggests that, whilst MSMP may not have impacted on children's overall levels of happiness or satisfaction with life, the project may have contributed to a specific aspect of social wellbeing, namely fostering stronger friendships with peers.
- Survey data did not demonstrate a note-worthy increase in children's social wellbeing between baseline and endpoint or a measured increase in children's sense of being 'close to others', which might have acted as a proxy for improved relationships with peers.
- In future, Learning through Landscapes should refine the social wellbeing aspect to focus more specifically on children's peer relationships, or by linking MSMP wellbeing measures with use of schools' own data on social and emotional learning where available.

4.7 Children's attitudes to their school grounds

Children's attitudes to their school grounds improved over the course of My School, My Planet. The case studies revealed examples of children's new-found responsibility for their school grounds, alongside a sense of empowerment to continue making changes after the pilot ended. Survey data corroborated the finding that children felt more agency over their school grounds, but also gave rise to questions that future evaluators might usefully explore regarding the many children who still felt they could not change the school environment at the end of the project.

"It's not just a playground now it's a live living space where there are plants and animals to discover and to promote and to foster. I think that's been a really positive change from where we lived."

Senior leader, School 1

There was consensus across case study schools that My School, My Planet (MSMP) empowered children to make changes in their school grounds. At the start of the project, some trainers and senior leaders reported children feeling that their school site was the business of maintenance staff, whereas by the end of the project they were invested in the idea that it was their responsibility too. In School 1, for instance, the senior leader felt MSMP had helped children see the school site as a place for animals and plants to live and to thrive. This may, in part, be due to children making visible changes to the school site, such as digging ponds, building a bug hotel, and planting trees and flowers, all of which made them feel invested in the place's future. Children's sense of empowerment was reflected in their pledges at the end of the project:

"I want to help the world because we can plant more trees in our school and grow more seeds"

Child, School 1

Across all case study schools, MSMP was reported to have resulted in children making more use of the school grounds in their own time and school leaders agreed that MSMP had transformed their grounds:

"The school grounds at break time are a very different place. I see the kids actively making use of the stuff that they've put in place through My School, My Planet, not necessarily under adult direction. Just off their own back, through their own social time. They're making use of these things, so that's been really pleasing."

Senior leader, School 2

There is some evidence that the outputs of MSMP children's work may have had unanticipated spill-over benefits for other children. In School 4, there was evidence that children who had not taken part in MSMP were making use of the shelters and spaces developed during the project.

Findings



Children annotate a map to inform their decisions about changes they wish to make to the school: School 3 MSMP appeared to have created a legacy in children's positive feelings about their school grounds and their role in changing or maintaining them. In School 3 for example, children established their own plans to develop their school grounds, annotating photographs of the school site to decide where to plant things or transform areas. They then worked with the trainer to bring their plans to life, working in three different areas of the school site and securing funding from the school business manager to realise their plans. According to the trainer and school leader. this success led them to feel more invested in the maintenance of the school site, as it was something they had actively contributed to.

Survey findings also indicated that children's attitudes to their school grounds improved, although the measured change was small between baseline and endpoint. Improvements were most notable in relation to their agency, with the proportion strongly disagreeing with the statement that "Nothing I do will change the natural environment at my school" increasing by 12 percentage points. Given the nature of the MSMP programme, it is nonetheless noteworthy that at the end of the programme one in five children still felt they could not change the natural environment at their school. However, this may be for a number of reasons (for example school culture) unrelated to MSMP and the questions this raises are as much questions for the schools and the education sector, as they are for MSMP. Future evaluation might explore children's feelings about their agency over the natural environment of their school further.

Changes in children's feelings about having adequate spaces to play were small – indeed a quarter had an increased sense of not having enough spaces. On the other hand, heightened engagement with and awareness of the spaces around them may have led children to become more demanding over the course of the programme, which could be a positive benefit.



Distribution of scores



Individual changes

Nothing I do will change the natural environment at my school nb: reverse score n=482



Summary of findings

Average scores

- Children's attitudes to their school grounds improved over the course of MSMP: many felt more ownership and were empowered to make changes that incorporated more nature. Children also felt more connected to their school grounds, and made greater use of them, compared to the start of the project.
- Across all datasets, we found evidence that children felt more empowered to make changes to their school grounds at the end of the project than they did at the start.
- The evidence of children's improved knowledge alongside their heightened sense of responsibility for the local environment may have contributed children's sense of empowerment in relation to school grounds. These findings also align with a measured increase in children's sense of feeling 'useful' reported in relation to social wellbeing.

Children's school motivation

The evaluation found little change in children's overall motivation for school, although children appeared motivated to take part in My School, My Planet. Case studies painted a picture of children who looked forward to their sessions, and greatly enjoyed the project, but there was little evidence to point to changes in motivation for other aspects of school life.

"On the days that they know that My School, My Planet is happening, they were very motivated and really looking forward to it. So, motivation in children wasn't as challenging, but it certainly has improved their motivation for being outside."

Senior leader, School 2

This was reflected in survey data with children's school motivation (as measured by the extent to which children are happy with the school they go to) beginning high and changing very little between baseline and endpoint.

Across three of the four case study schools, trainers and school leaders reported that children had positive attitudes towards school prior to My School, My Planet (MSMP). Despite this, it was clear that children's motivation for MSMP itself grew over the course of the project. Senior leaders noted that children looked forward to the sessions and School 2's trainer felt that MSMP had given direction to the time children spent outdoors. School 2's senior leader also noted that students were "very motivated" on days that involved MSMP. In addition, the senior leader at School 1 suggested that the scheduling of MSMP activities helped to break-up the week: "Did My School, My Planet [help] with that motivation? Absolutely. It really gave them something to look forward to. We placed the sessions mid-week, which also gave a way of breaking up the week.... I felt that it really broke up that..., I don't want to say monotony of the week, but the... sitting in the classroom element. I think it really did give them something to look forward to."

Senior leader, School 1

One young person in School 2 reflected on their positive experience during MSMP in the following terms saying it was:

"So good to be doing something for the environment...[it's] fun...[and] something new and different..."

Child, School 2

In School 4, the senior leader reported that children had found the transition from remote learning back into school challenging. They felt that MSMP had helped ease this transition, noting that children had enjoyed MSMP and the associated opportunities to go outside:

"That was beautiful just to watch the excitement of the children getting out for the first time into the garden area and having to explore everything that was there, first of all, and reconnect with that garden because it had been closed for such a long time because of the lockdown"

Senior leader, School 4

The senior leader described children setting up an after-school club to discuss projectrelated ideas as evidence that MSMP had been successful in motivating children at school. However, it was less clear whether this filtered into their enjoyment of other parts of school life.

Survey findings revealed a very small drop in average school satisfaction but this was marginal and the proportion increasing and decreasing their score was the same. As with life satisfaction (Section 3.6), the measure's value was limited by the fact that such a high proportion rated their satisfaction at 10 in the baseline survey (40%) and that more than half of children scored their happiness with school at 9 or 10.⁷



Summary of findings

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Children were motivated to take part in the project, and enjoyed their time outdoors. However, there was little or no measured change in their overall happiness with their school.

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⁷ In the latest available data, 10–15 year olds rated their happiness with school at 7.39 (cf. 7.9 on MSMP baseline survey) and 11% gave a score below 5 (cf. 8% on MSMP baseline.) As with life satisfaction note difference in cohort age, as well as contextual difference given lockdown and COVID–19.

Children's learning about their culture and identity

My School, My Planet's impact on children's ability to link their learning to their own culture or identity varied between the four case study schools. We found positive impact on children's learning about their own culture or identity in two case study schools, whilst in the other two schools, this area presented a challenge for trainers.

'This is huge, not only for the children during the pandemic, but also the community responsibility, the family responsibility and the rules that they have within that to reap back with nature, to reconnect with the environment. And create a society that will be able to look after themselves a bit better because they've been able to make those connections."

School leader, School 4

The outcome, "Children relate understanding about project themes to individual experiences of culture, cultural heritage and identity", was new territory for Learning through Landscapes (LtL). The pilot was intended to explore how this outcome might be delivered through My School, My Planet (MSMP). As such the evaluation focussed solely on qualitative evidence for changes related this outcome, partly because validated measures of change did not exist and partly because the evaluation was intended to be exploratory for this outcome; shedding light on how MSMP's activities might link to children's identities and culture.

School 1 provides an example of a school that successfully linked learning to children's cultural identity through discussions around biodiversity. In this school, children with an international heritage linked their learning about local biodiversity and migratory species to the countries their families had come from. For example, children found out that birds they spotted during MSMP spent part of the year in places such as Morocco and Somalia. They also discussed how the biodiversity of their local area compared to the places their families had originated from. The trainer supported these discussions by bringing in a large map of the world, which the children annotated to share their heritage. This personal connection with what they learned as part of MSMP seemed to spark one particular child's interest, who went on to tell the trainer about a new species of mouse that had just been found in Somalia (where some of their family were from) for the first time in 50 years. The trainer was able to harness this enthusiasm by seeking out information on the mouse and helping the child share it with the rest of the class, something which made him feel proud. She felt that the boy would not have shared this "proud" personal connection without MSMP:

"What I saw between the first week and the last week was people building a pride in place, a pride of where their school was and what they were doing with it, but also a pride in the places their families come from. I had one little boy... say "Miss, Miss! Did you know there's been a mouse just found in Somalia that hasn't been seen for 50 years?" ... I don't think he would have shared that as a thing to be proud of from Somalia without this My School, My Planet."

MSMP trainer, School 1



Children visiting a local mushroom farm: School 4

►

World map, annotated by children to show places where they had personal connections: School 1



Another successful approach involved learning which was linked to historic local economies. In School 4, children were able to make connections between what they learnt during MSMP and their families' cultural history and the local area in Northern Ireland. In the past the area's economy involved growing fresh produce such as mushrooms; As part of MSMP, children grew mushrooms themselves, learnt about mushroom cultivation and visited a mushroom farm to learn about the area's economic heritage. This learning helped the children to make cross-generational connections too by enabling conversations with grandparents about their experiences.

In two other schools, MSMP's impact on children's learning about their cultural identity and heritage was less clear or more limited, presenting challenges for trainers. In School 3, the trainer reported being uncomfortable addressing the issue of heritage. She worried that by identifying children's associations with other countries she might inadvertently imply that they were not Welsh, which could offend those from ethnic minority backgrounds.

In School 2, both the trainer and head teacher felt that concepts of identity and heritage were difficult for children to understand, given the nature of their additional needs. For both School 2 and School 3, additional support could have helped trainers approach discussions around nature and children's identity in different contexts.

Summary of findings

- Case study data showed that children in different schools had different experiences of applying their learning to their own cultural identity or heritage.
- In some schools, children took part in activities that clearly linked knowledge acquired through MSMP to their and their families' identities. In these schools, trainers and school leaders felt positive about MSMP's impact on this outcome.
- In other schools, trainers found it more difficult to build this element of MSMP into their activities. In these schools, children had fewer opportunities to link their learning to their cultural identities or heritage.
- The pilot therefore demonstrates the potential benefits of linking learning about the environment to children's cultural identity or heritage but shows that this is not always easy and all trainers need to be carefully supported and developed to do so.

4.10 Programme delivery

In general, schools were extremely positive about the way My School, My Planet had been delivered and reported a desire to run the programme and work with Learning through Landscapes again in future. Schools particularly valued Learning through Landscapes' trainers' expertise in delivering outdoor learning sessions, and the way trainers worked with school staff to ensure the project ran smoothly.

"I would love to [run MSMP] again. I'm currently paying the local authority to keep it going. I would be very keen to get more classes involved and to take part again. It was a wonderful step into the world [of outside] learning for us. And we've got lots of things spring-boarding off the back of this to keep outdoor learning at the heart of what we do. It's part of our school improvement plan."

Senior leader, School 1

Trainers were also positive about the process of running My School, My Planet (MSMP), and highlighted a number of ways the project could be streamlined or augmented in future.

Learning through Landscapes' (LtL) administration of the MSMP pilot was viewed positively in case study schools. Senior leaders were unanimous in wanting to work with LtL again. Many had already made plans to continue elements of MSMP, and all indicated that they would like to include more children if LtL were to run the programme again in their school. In School 3, a secondary school in which participants came from the Year 7 group, the Headteacher believed that the project might have even more impact with older year groups:

"We would definitely do it again in a heartbeat. It'd be nice to see the outcomes from older students, maybe some students who have become disengaged with the curriculum or maybe have maybe a little bit of disrespect for the school environment. Try out a project like this on them to change their attitudes"

Senior leader, School 3

Across the case studies, trainers identified a number of common factors that enabled MSMP to run smoothly:

- Support from school staff (usually teachers or teaching assistants) in helping run activities. This allowed trainers to manage several activities at once, and to offer children a choice of activities.
- Support from senior leaders in the form of visible endorsement of the project. This was seen as both:
 - encouraging school staff to participate in the project.
 - and giving children recognition for their work in the school grounds.
- Spending time at the start of the project discussing plans with classroom teachers had been beneficial according to trainers and senior leaders in schools 2 and 4. This time had allowed them to:
 - Adapt resources and activities for children with additional needs:
- "It was such a successful experience for an ASN school. It was fantastic and we would welcome them back, we would do it again any time."

Senior leader, School 2

- Provide informal CPD for teaching staff on learning outside the classroom:
- "[MSMP has been] a stepping stone towards opening that up across the key stages so that all children within the school have an opportunity to be able

to do that [learn outside]. And we can then learn so much as a school from the outside providers who are coming in with a skill set to help us enhance their learning."

Senior leader, School 4

Trainers and school leaders also highlighted a number of ways they felt the delivery of MSMP could be improved for the future. These were:

- 1 Building in more preparation time at the start of the project. Trainers felt that LtL had given them ample resources and ideas for activities, but that they found it difficult to plan sessions and source materials in the time available. Whilst this was unavoidable for the pilot which was intended to be a rapid response in the context of COVID-19, trainers and senior leaders gave tangible examples of how they might use additional preparation time in future to:
 - Tailor content to children's learning needs.
 - Set expectations for children in terms of what the project would involve.
 - Allow trainers and children to get to know each other ahead of the first session.
 - Tailor delivery to the schools' context. More preparation time would allow trainers to negotiate the timing of sessions in different school phases. For example, in the secondary school case study, it was more difficult to free up time for long sessions so sessions had to be shortened. On the other hand, the trainer at a primary school would have preferred her sessions to be shorter, but more numerous, with 16 half days rather than 8 full days. Whilst the timing of sessions in the pilot was constrained by the rapid roll-out, as well as schools' own difficulties in managing risks of COVID-19

transmission, a longer lead-in time for trainers and schools in future may help trainers tailor the structure of the course to schools' needs.

- 2 Adapting the design of evaluation questionnaires. Both senior leaders and trainers raised questions about the accessibility of the pre- and post- survey questions for all children, particularly primary age children and especially those with additional needs. Many of these difficulties related to the Connection To Nature scale (explored in section 3.2).
- **3 Easing the administrative burden of evaluation.** In particular, trainers felt that administering questionnaires at the start of the project created difficulties for them because:
 - Children were expecting physical activities outdoors and were unhappy that their first session involved answering questionnaires.
 - Trainers found it overly burdensome collecting consent, administering questionnaires on the day and inputting data from the questionnaires.
- Structuring session content around 4 a smaller number of "core" activities. Trainers felt that LtL had provided them with plenty of resources to support their sessions. However, these occasionally felt overwhelming and several felt there could have been greater guidance on how to use them. One trainer noted that the programme was not as structured as other programmes he had worked on, which meant that success seemed to depend on the trainer, children, teacher, resources, area and other circumstances. Two trainers and one senior leader suggested that a more structured, simplified set of activities might have allowed children to understand what they would be doing over the course of the project, thus helping to "increase that excitement week on week".

5 Supporting trainers to build in activities around children's cultural identities and heritage. As set out in Section 4.9, two trainers found it difficult to plan activities to help children link their learning to their cultural identities and heritage. One trainer expressed a lack of confidence in delivering these activities, and was unsure about the distinction between children's "actual personal heritage" and the shared heritage of their locality and its connection to the wider world. Trainers did not always appear to be aware of the training, support and guidance that LtL had made available around this outcome. Another trainer suggested that they would value support from other trainers on this MSMP outcome, for example hearing about other trainers' experiences running activities to support this outcome.



Conclusion and recommendations

5

This evaluation took the form of an empirical enquiry, observing and measuring changes for children taking part in My School, My Planet.

It was therefore not a control group study capable of proving causality, that is, showing that the programme was the cause of observed changes. Despite this, the evaluation points not only to a number of measured changes that clearly took place for schools and children over the course of the programme, but also to highly plausible causal links identified in the case studies. These point towards reasons why programme delivery may have contributed to the observed changes.

Overall, this evaluation reveals a positive, promising set of findings from the My School, My Planet (MSMP) pilot. The MSMP pilot has demonstrated that a large number of children from a range of backgrounds can be recruited to this programme and that they seem to derive extensive benefits from their involvement.

In particular, this evaluation notes positive changes in relation to children's:

- Knowledge about biodiversity, climate change and soils, and how the three topics are linked.
- Feelings of agency and engagement with issues relating to their local environment, and their school grounds, alongside their understanding of how local changes might contribute to wider environmental processes.
- Physical activity levels, especially in the context of a return to school following COVID-19 lockdowns and school closures.

The evaluation also found positive, albeit less consistent evidence of positive changes in terms of children's:

- Connection to nature, where children with low levels of connection to nature before the project appear to have benefited the most, but where changes were small across the cohort as a whole.
- Social wellbeing, where there appeared to be some benefits in terms of peer relationships, but less benefit across other aspects of social wellbeing.
- Understanding about the links between the environment and individual identity or cultural heritage, where case study evidence pointed to strong positive changes in some schools but less in others alongside an overall need for further training and support.

Finally, children were highly motivated to take part in MSMP and enjoyed the project, although there was little evidence of improvements in children's general motivation for school.

Staff and children in the schools that took part were extremely positive about the programme and unanimously expressed a desire to continue this type of work. There was considerable praise for LtL's approach to delivering the work. 6

Appendix 1 National Lottery Heritage Fund Focus Areas

In this appendix we provide a summary of outcome data from seven schools in the National Lottery Heritage Fund focus areas.

School Name	Country	Town	Phase
Alperton Community School	England	Brent, London	Secondary
Edmonton County Primary School	England	Enfield, London	Primary
Whinhill Primary School,	Scotland	Greenock , Inverclyde	Primary
St Francis Primary School	Scotland	Port Glasgow, Inverclyde	Primary
St Patrick's Primary School	Scotland	Greenock, Inverclyde	Primary
Balmalloch Primary School	Scotland	North Lanark	Primary
Awel y Môr Primary School	Wales	Port Talbot	Primary

Data from these schools generally follows similar trends to those reported elsewhere in this report: the most notable measured improvements are discernible in relation to children's 'topic knowledge' and 'physical activity levels'.

Measured change in 'attitudes to school grounds', 'social wellbeing' and 'engagement in issues around local environment and heritage' were smaller than those observed in the full cohort of young people.

Outcome	Measure	Pre	Post
Nature connection	Connection to Nature (n=108)	4.5	4.4
	Notice nature at school (n=107)	4.0	4.2
Engaged in issues about local environment and heritage	Aware of impact of school grounds (n=101)	3.6	3.5
Topic knowledge	Biodiversity knowledge (n=91)	1.0	1.4
	Climate change knowledge (n=89)	4.6	5.3
	Soils knowledge (n=97)	4.5	4.7
Physical activity	Physical Activity (CPAQa) (n=104)	20.8	24.0
	How often Active (n=101)	2.8	3.0
Social Wellbeing	Happy with life (n=98)	8.2	8.1
	SWEMWBS (n=88)	22.1	22.4
Attitudes to School Grounds	Nothing I do will change the natural environment at my school (n=118) Reverse score	3.6	3.5
	Spaces to play/have a good time (n=98)	3.8	3.9
School motivation	Happy with school (n=98)	8.2	8.0





Learning through Landscapes

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