The OWL Collaboration

Year 3 Evaluation Report

2024

ImpactEd Evaluation

THE DULVERTON TRUST

Countryside Education Trust

BORE PLACE

Ufton Court

Ringsfield Hall

Magdalen Environmental Trust

Shallowford Farm
making the difference

lambourne end
centre for outdoor learning
inspired to inspire

Jamie's Farm
Cultivating Change

Farms for City Children

Country Trust
Connecting children with the land that sustains us all

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Welcome

At **The Ernest Cook Trust,** we believe that every person should know the feeling of being utterly captivated and intrigued by nature. As a UK educational charity, the Trust's important work helps nurture a lifelong journey of learning, appreciation and respect for the countryside through a range of Outdoor Learning experiences.

To achieve this:

We give grants, fund Outdoor Learning and find innovative ways to work with funding partners.

We provide and fund Outdoor Learning programmes for children and young people.

We collaborate with partners and stakeholders, maximising our impact and influence.

At the heart of OWL sits collaboration, an acknowledgement that the biggest impact comes through Outdoor Learning providers and funders working together, within shared frameworks and undertaking collective evaluation. The evidence of both the need in our young people and the support our collective work offers feels comprehensive and compelling.

A relatively new government and the subsequent Curriculum Review has inevitably led to lobbying and positioning, with multiple causes and agendas jostling for limited airtime. Our collective commitment to young people flourishing, the depth and breadth of our evidence and the power of our storytelling is our purposeful contribution to the debate.

Our ambition is a long-term commitment to The OWL Collaboration and increasing the number of young people benefitting from a week outdoors in nature, whilst seeking every opportunity to influence decision-makers, sharing the answers and opportunities our work provides. This report captures the power of The OWL Collaboration brilliantly; let's keep delivering!

Ed

Ed Ikin, Chief Executive, The Ernest Cook Trust

ImpactEd Evaluation helps schools, education and youth organisations have a positive impact on young people's lives by enabling them to understand what's working and do less of what isn't. We provide specialist evaluation support to the education and youth sector, helping organisations to understand where they are making the biggest impact and where to target their resources.

ImpactEd collected, collated and provided the raw data for this the quantitative element of this evaluation.

Introduction

Our Purpose

The Ernest Cook Trust (the Trust) developed the Outdoor Week of Learning (OWL) Collaboration Programme in 2021 and is committed to using the learning from this impact-driven programme to champion the mainstream funding of Outdoor Weeks of Learning as outlined in its Theory of Change (Fig.1).

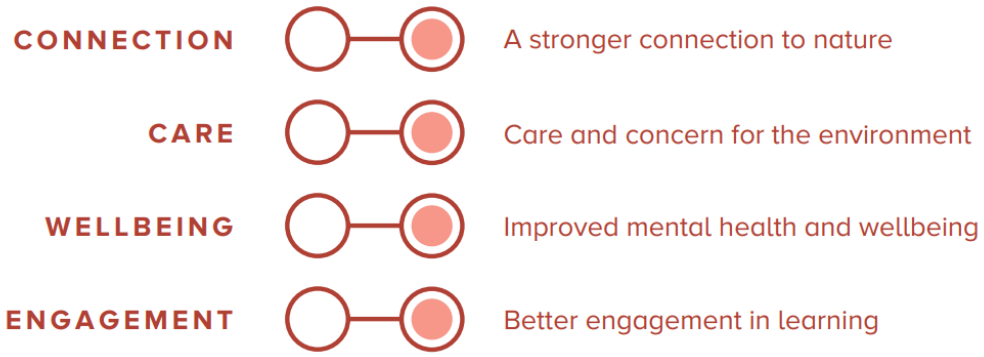
We seek to address the **multiple and complex needs** that arise through the intersection of children and young people increasingly leading nature-depleted lives and the crisis of mental health, learning disengagement and climate.

Our vision is of an education system that embraces Outdoor Learning, helping children and young people to flourish.

In response, we provide immersive weeks in nature with targeted schools to proactively address the current inequity of access to nature. We help schools grow their capacity to embrace Outdoor Learning and help amplify the collective voice of the Outdoor Learning sector.

Fig.1: The OWL Collaboration Theory of Change

In view of the growing body of evidence that links embedded Outdoor Learning with increased nature connectedness, positive health and learning outcomes (LOtC Summary of Evidence, 2022), we use a range of measures to understand impact against the following key outcomes:



Our Partnerships

The OWL Collaboration is a partnership of Schools, Outdoor Learning Centres and Funders.

Schools

Primary, secondary and special schools are all eligible to be part of The OWL Collaboration. Our programme works with targeted[1] schools to ensure that we are enabling children and young people with the highest level of needs to benefit from a residential week in nature.

Outdoor Learning Centres (OLCs)

Our Outdoor Learning Centre partners are at the heart of The OWL Collaboration. They each bring a diverse wealth of experience in delivering farm and environmental based learning to children and young people alongside safe, supportive and exciting residential opportunities.

Our **Outdoor Learning Centre** partners in 2023/24 were:

Bore Place, The Commonwork Trust, Edenbridge, Kent

Magdalen Farm, Chard, Somerset

The Countryside Education Trust, Beaulieu, Hampshire

Ringsfield Hall, Beccles, Suffolk

Farms for City Children, Pembrokeshire & Gloucestershire

Shallowford Farm, Newton Abbot, Devon

Jamie's Farm, Bath, Hereford, Lewes & Monmouth

Ufton Court Educational Trust, Englefield, Berkshire

Lambourne End Centre, Essex

We also partnered with **The Country Trust** to develop resources for teachers, pupils and families.

[1] This is measured by the % of Free School Meals and whether the school is drawing pupils from areas of deprivation (as defined by the Multiple Deprivation Index). In addition, we target schools with high numbers of pupils in minoritised ethnic groups, Pupil Premium, SEND, Children who are Looked After, young carers and pupils experiencing poor mental health.

Our Funders

THE DULVERTON TRUST

The OWL Collaboration offers Trusts and Foundations the opportunity to be involved in our impact-driven programme with the ambition to influence future funding and policy streams through demonstration of success.

Since 2021, we have been grateful for the support of The Dulverton Trust. The Dulverton Trust's funding for Year 3 contributed towards the grant funding of core OWL residential visits, school transportation and teacher training. Beyond financial support, The Dulverton Trust has provided advice and guidance, fostering a collaborative partnership that has strengthened the co-funding relationship.

As a collaborative initiative between Outdoor Learning Centres, Schools, and Trusts and Foundations, we warmly invite potential co-funding partners to join us in supporting The OWL Collaboration programme. This partnership offers a unique opportunity to provide grant funding that concurrently delivers grassroots impact and strengthens the collective voice towards a systemic, pedagogical shift towards Outdoor Learning for the benefit of children and young people.

The Ernest Cook Trust would welcome discussions with any organisation eager to join us on this meaningful journey.

Please contact us: owlcollaboration@ernestcooktrust.org.uk

Our Offer

An Outdoor Week of Learning (OWL) is typically a 4 night/ 5 day residential, a timeframe agreed at inception on the premise that this allows enough time for participants to become accustomed to their new environment, to overcome initial challenges and to experience success. In Year 3, 82% of OWLs were 5 days in length. Ufton Court largely continued to offer their repeated model of three, two-night visits throughout the year, allowing the same cohort of children and young people to build on their Outdoor Learning incrementally.

The OLCs are central to the design and delivery of each OWL in their own, unique settings. Whilst each OLC partner adopts a pedagogical approach to encourage a positive shift towards one of the four key OWL outcomes, it is important to recognise that partners bring different forms of expertise which shapes the way an OWL is delivered and the possible impact it might have. Many focus on immersive engagement in nature, some offer a programme with stronger links to the school curriculum, whilst others employ therapeutic support to use farm-based experiences to focus on the individual's social, emotional and learning journey.

Outdoor Learning practitioners also work with schools individually to ensure that each OWL meets the varying needs of each cohort with age range, learning requirements and group dynamics in mind.

A Common Endeavour

Despite the agility and range of an OWL intervention, there are important commonalities across all settings which are regarded as key mechanisms of change in achieving the desired pupil outcomes.

Limited access to technology

The outdoors in all elements

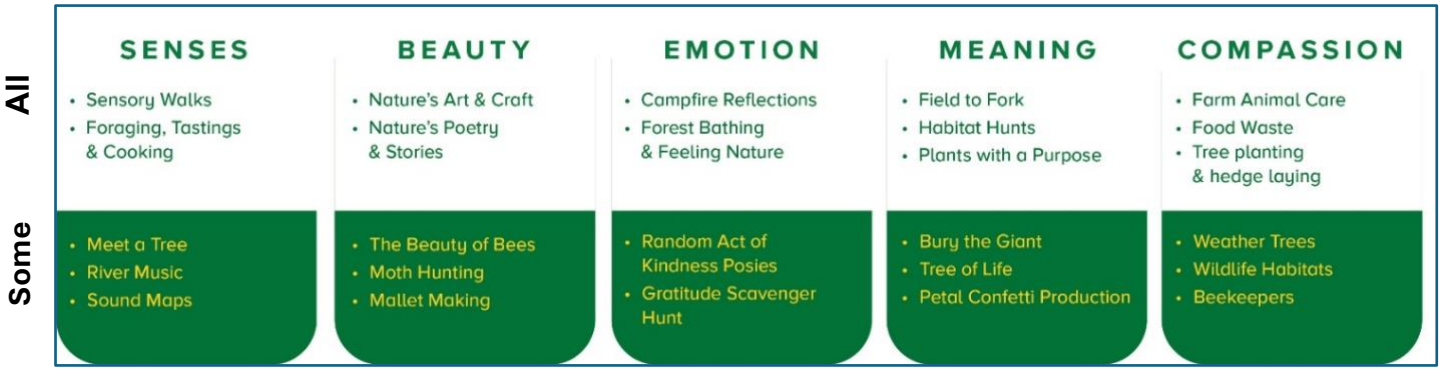
Routines and responsibilities

Social connection

Regular reflection

5 Pathways to Nature Connection

The 5 Nature Connection Pathways[2] have also helped The Collaboration frame other aspects of common practice. Below are examples of some common (All) and diverse (Some) interventions delivered during an Outdoor Week of Learning across settings. Many learning opportunities promote the active engagement of noticing, appreciating and experiencing the natural world rather than just spending time in it.



[2] 5 Pathways to Nature Connection

Partner Voices

Four delivery threads, described by OLC partners below, weave through the OWL offer and across all settings.

Magdalen Farm

Feed, touch, care for farm animals. Sow, taste, harvest plants. Get hands-on in producing the food that you consume. Learn about food miles, seasonality, organic production and how everything is connected.

There are strong links to the curriculum and a depth of understanding is made in a unique, fun way. Children thrive in the Hands-on-Farming activity and extension activities of Waste Not Want Not, Eco-Cooking and Habitat Hunters.

Field to Fork

Shallowford Farm

Our pupils have hands on experience of the field to fork journey. Our programme includes seasonal foods, plant care, harvesting, the composting process and cooking. We learn about food miles and think about food waste.

Our programme has animal husbandry at the centre with routine daily cleaning out, feeding and care of our farm animals. We find that this encourages a significant development of empathy and early comprehension of shared responsibilities. Livestock herding, weighing and health and welfare checks also inspires curiosity and furthers learning tailored to the school curriculum.

Farms for City Children

Our focus on nature nurture is delivered through activities to induce greater nature connectedness. From biodiversity focused walks to birdwatching and beekeeping to storytelling and astronomy, young people learn to be mindful and to notice their environment.

We encourage our children to take responsibility and feel empowered to be active nature-focused citizens. The impact of providing these experiences in childhood means that more children will grow up greener and will contribute to a sustainable future.

Nature Discovery

Bore Place

All children and young people who visit support our ecology team in carrying out wildlife surveys on the site. Whether that be bird surveys, mammal traps, bat walks, footprint tunnels or worm surveys, everyone gets involved and helps record the data.

Being involved in the data collection process provides an opportunity to educate groups on why wildlife is important and how we can develop areas around their home to improve wildlife habitats and diversity on their doorstep.

Jamie's Farm

Our working livestock farms provide opportunities for young people to engage in purposeful work with tangible outcomes. Caring for animals is a powerful tool in unlocking nurturing behaviour in young people, as well as giving opportunities for teamwork and space for reflective conversations.

Young people are challenged to push themselves out of their comfort zones and are set up for success, meaning we have lots to celebrate at the end of every programme. This focus on the positive helps young people to shed negative labels and allow themselves a renewed sense of self on return to home or school.

Nurturing with a Purpose

The Countryside Education Trust

We believe it is vital for all young people to succeed during their time with us, whether through tending the animals, taking on team challenges or helping our staff to look after Home Farm. We enjoy seeing the countryside work its magic on our guests.

We don't ask teachers to tell us much about individual children before they arrive, beyond, of course, any special needs which we accommodate, as all our experience shows that children identified as challenging in the classroom setting are often transformed during their residential. This makes for more positive relationships between peers and teachers alike.

Lambourne End

Our OWL is run to a themed daily structure over the week: Dream Team/Food and Farming/Adventurers/Back to Nature/Celebration. It is characterised by a commitment to creating safe but challenging environments designed to help young people grow through a person-centred and trauma-informed approach.

To encourage reflection and personal growth, we share music and memories around the campfire before writing down wishes to take onward with us from the week before dispersing them into the fire and the universe. The ritual helps to bring the week to a close and encourages participants to consider who they want to be as they head back into the 'real world.'

Field to Fork

Connecting and Reflecting

Ufton Court

The activities during an Ufton journey are embedded with moments of reflecting using the children's own guided Ufton Passport journal. This helps children to articulate their thoughts on their individual experiences—whether they're connecting with nature on the farm or collaborating in team activities that fostered peer relationships.

Children also collectively reflect through the four pillars of our learning tool. They share moments where they built self-esteem or demonstrated empathy, captured through writing or drawing all together. Finally, they provide anonymous positive feedback to their peers, highlighting the wonderful achievements they witnessed during their time together.

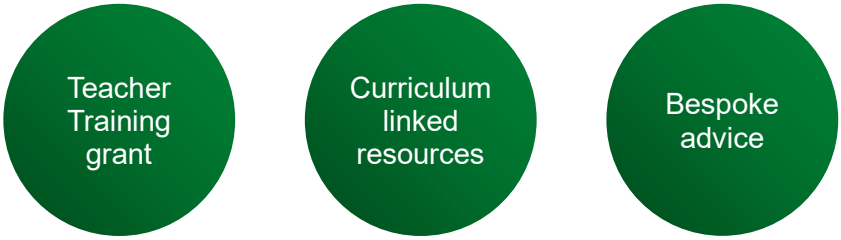
Access

From inception, the programme has included the offer of a transport grant to promote access.

2023/24 also saw the launch of our pilot Residential-in-a Box resources created by The Country Trust, in collaboration with OWL partners. These provide familiarisation resources and activities for families and teachers to help prepare pupils for their week away. As part of this project, some partners also opted to include widget kit lists (to remove language barriers) and site video tours, to help those who may feel anxious about staying away from home in an unfamiliar setting.

The OWL Schools Handbook was also extended to include all the live links needed for ease of access to all programme elements.

Legacy



This year, we continued to offer an Outdoor Learning Teacher Training Grant, accompanied by a comprehensive Outdoor Learning Training Directory with information and links to trusted providers. In response to teacher feedback in 2022/23, we significantly increased the communication of this legacy offer with clear information and signposting in the Schools Handbook, at teacher interviews and in routine follow-up written communication throughout the year. We also adjusted our grant criteria to include an option to fund teacher release to a maximum of 20% of any successful grant.

Following teacher feedback, we additionally modified our offer for annual membership to Council for Learning Outside the Classroom from a universal to opt-in approach for existing schools.

Network Building

As well as partners in delivery, each OLC is an active member of The OWL Collaboration Network. The Trust facilitates and funds regular online and face-to-face Network meetings, reciprocal OLC visits and placements and joint training opportunities to help the Network achieve its strategic goals summarised below:

- **Develop a strong evidence base demonstrating the impact of an OWL residential**
- **Provide holistic support to schools to help embed an Outdoor Learning pedagogy into school culture**
- **Develop a community of practice through sharing of ideas and knowledge creation**
- **Leverage the collective voice of the Network to influence policy change**

2 Literature Review

Nature Connection

Nature connectedness relates to an individual's subjective sense of their relationship with the natural world (Pritchard, 2020). There is a wealth of evidence proving that having increased nature connectedness improves people's environmental action, wellbeing and engagement in learning (Lengieza, 2024; Pritchard, 2024; Krettenauer et al., 2024; Mason et al., 2022). To have high nature connectedness levels as adults, childhood experiences in nature are imperative (Barrable et al., 2024). Unfortunately, it is widely acknowledged that there is an increasing disconnect between people and the natural world (Gelsthorpe, 2017; Beery et al., 2023). Many argue that this disconnect is a key driver of the biodiversity and climate crises, as people will not protect that which they neither care for nor understand (Clayton et al., 2017, Beery et al., 2023). There is hope that by addressing this disconnection, some of these most pressing issues may begin to be reversed (Clayton et al., 2017; Pörtner et al., 2023).

Despite the significant personal and societal benefits of fostering a connection with nature, particularly through early intervention, opportunities for Outdoor Learning within the UK education system remain limited. Factors such as health and safety concerns, curriculum demands, and time pressures are frequently cited as barriers to providing these valuable natural experiences (Gelsthorpe, 2017).

Care and Concern for the Environment

Addressing the current environmental crises requires fostering individual care and concern for nature, particularly in the UK, one of the world's most nature-depleted countries, with 1 in 6 species at risk of extinction (NBN, 2023). Providing opportunities for children to engage directly with the natural world plays a vital role in nurturing this connection. Research shows that spending time in nature can encourage *pro-environmental* behaviours, such as recycling or litter-picking, and *pro-conservation* behaviours, like volunteering or joining environmental organisations. Importantly, these behaviours are strengthened when individuals develop a strong sense of *Nature Connectedness*—a meaningful relationship with the natural world (Martin et al., 2020). Positive experiences in nature during childhood have been shown to influence pro-environmental behaviours in adulthood (Rosa et al., 2018), highlighting the long-term impact of early engagement with nature.

Conversations surrounding nature and the environment, particularly around topics such as climate change and biodiversity loss have been referred to as a "socially constructed silence", which is also believed to occur at policy level. This silence occurs partly due to fear of social isolation, through rejection or stigmatisation, with those with high environmental awareness often branded as "hippies" by those who distance themselves from these issues (Hamilton et al., 2019)

Furthermore, individuals often avoid discussing these topics due to feelings of anxiety, fear, potential loss, guilt and perceived helplessness, which can also contribute to 'issue-fatigue.' Indeed, in the UK, 64% of children aged 11 to 16 report experiencing eco-anxiety, a feeling of fear or concern about the future of the planet (Action for Conservation, 2024). There is growing evidence that immersive natural experiences, combined with sustainability education and open discussions, can help address eco-anxiety and promote resilience. By fostering positive, hands-on engagement with the natural world, such approaches empower young people with a sense of agency, connection, and the pro-environmental attitudes needed to tackle the challenges of climate change and biodiversity loss (Hamilton et al., 2019).

Wellbeing

The state of mental health in young people in the UK is a cause for concern: in 2023, 20.3% of children aged 8 to 16 and 23.3% of young people aged 17 to 19 were reported as having a probable mental disorder (NHS, 2023). There is a suite of evidence to suggest that spending time in and having a greater connection to nature improves your mental health, both through hedonic wellbeing, relating to pleasure (Capaldi et al., 2014), and eudaimonic wellbeing, relating to a sense of purpose. Specifically, self-reported personal growth has been found to have the strongest relationship with Nature Connectedness (Pritchard et al., 2020).

There is an accepted link between the touchstones of Outdoor Learning (risk taking, problem solving, teamwork) and children of all ages developing the important wellbeing indicators of confidence, resilience and empathy. A systematic review by Becker et al. in 2017 concludes that these skills learnt outdoors, and the related self-esteem, are often transferred into real-life situations and, therefore, Outdoor Learning provides children with the lifelong skills needed for success.

In addition to mental wellbeing, interacting with nature can also improve physical wellbeing. This is achieved through measurable physiological changes that occur when we interact with natural environments. Examples include reducing blood pressure, heart rate, muscle tension, and salivary cortisol levels (Hartig et al., 2003; Tyrväinen et al., 2014; Puhakka, 2021).

Engagement in Learning

Many studies support the idea that spending time in nature improves cognitive function through *attention restoration*. Natural environments help alleviate mental fatigue by providing gentle, restorative stimuli that engage the brain without overwhelming it. This contrasts with classroom or indoor settings, where prolonged focus on tasks, screens, or structured activities can be mentally taxing. Similarly, urban environments demand directed attention—such as navigating busy spaces or avoiding distractions—which can further deplete cognitive resources. By offering a calming and

restorative alternative, outdoor environments allow students to recharge, supporting improved focus, attention, and overall cognitive performance when they return to the classroom.

The restorative qualities of natural environments have been found to improve cognitive function through improved concentration, increased working memory and decreased anxiety (Van den Berg et al., 2003; Berman et al., 2008; Bratman et al., 2015; Mason et al., 2022).

Furthermore, learning in outdoor environments, away from the classroom has been proven to increase academic attainment. This is achieved through facilitating first-hand experiences, which in turn enhance learner understanding, and makes subjects more interesting (Natural England 2016). Natural England's (2022) study shows that LINE (Learning outside the classroom In Natural Environments) is making a difference to the lives of primary school children across a wide range of indicators including educational attainment, behavioural outcomes and health, with a predicted Social Return on Investment (SROI) ratio of £4.32 for every £1 invested.

Teaching children in the natural environment is additionally beneficial for the wellbeing of school staff and can lay down valuable foundations for future experiences and subject knowledge. Research over the last 10 years indicates that practitioners see children in a different light when teaching them in the outdoor environment and this positively affects the teacher to child relationship which in turn positively influences children's engagement in their learning (Bilton et al., 2017).

3 Methodological Framework

3.1 Ethical Considerations

Ethical considerations are vital in ensuring respect and fairness towards participants. Data collection for the programme was carried out with strict adherence to a set of ethical standards including:

Full, written **transparency** to all participants (pupils, parents/guardians and school staff) about why and how the research was being conducted, the levels of data security involved and privacy policies of both ImpactEd Evaluation and The Ernest Cook Trust shared with schools and parents/guardians.

Providing clear explanation that **participation** in the research was **voluntary** with signed **Data Sharing Agreement** permissions by the school and **Research Participation Consent Forms** by parents/guardians.

Maintaining **data security and confidentiality** through the use of a password protected platform, access to sensitive information being limited to authorised personnel only, and **anonymisation processes** which were applied at the data matching stage to protect participants' identities.

Clarity of communication in how we planned to collate and **share the findings**, including with all participating schools.

Additionally, we sought to present the surveys in a **user-friendly format** and designed the qualitative evaluation with participant benefit in mind.

3.2 Evaluation Design

Survey: Design, Sample and Analysis

Pupil surveys

Design and administration

Together the Trust and ImpactEd Evaluation designed pupil surveys (see Appendix 2 & 3). A shorter survey consisting of 10 questions covering each of the pupil outcomes was designed for pupils with SEND, however, none of the schools or organisations opted to use this survey. All survey questions have a 5-point Likert response scale, except for the Custom Inclusion of Nature in Self Scale (INS) which is a 6-point Likert scale.

Pupil demographic data and survey data were collected through ImpactEd Evaluation's School Impact Platform. Pupils were asked to complete the same survey at three different timepoints to measure the impact in the short and medium term. Completion of each survey was conducted within a two-week window as explained below:

- **Survey 1**: two weeks before the residential up to the first day of the residential (pre-visit survey)
- **Survey 2**: on the last day of the residential up to two weeks after the last day (post-visit survey)
- **Survey 3**: 6 weeks after the last residential day up to 8-weeks after the last residential day (6-week survey)

Pupil sample

A total of 1052 pupils participated in this evaluation. The breakdown of pupils' completion of surveys is shown in Table 1. Given the high number of fully matched responses, the results in this report are based on the fully matched sample, with the exception of the Short Warwick Edinburgh Mental Wellbeing Scale (SWEMBWS). Given that the pre to post unmatched statistical test (Wilcoxon Signed ranks) yielded a highly significant result for the SWEMBWS, this pupil sample was favoured over the fully matched responses which yielded a non-significant result (P =0.53 Paired T Test).

Details on and sample sizes for pupil demographics collected can be found in Appendix 4. Given the similarities between Pupil Premium (PP) and Free School Meals (FSM), we focused on FSM, and due to a low sample size (n=13), analysis of data from Children who are Looked After (CLA) was not conducted.

Pupil survey analysis

For each of the outcomes, means and percentage changes were calculated. For the main outcome data (i.e. not the subgroups), standard error and statistical significance tests were also conducted. There was a difference in parametric and non-parametric distribution[3] between the different surveys, so Paired T Tests and Wilcoxon Signed Ranks Tests were conducted as appropriate (See Table 1).

Correlation analysis was also conducted using Pearson's correlation coefficient to analyse the relationship between pupils' Wellbeing and Nature Connection scores (both the Wesley-Schultz and the Adapted NCI).

Table 1: Breakdown of pupil sample size across time points and the statistical test used

Outcome Measures	Pre to Post Visit	Pre to 6 Weeks Post Visit	Fully Matched	Statistical Test Used
Wesley Schultz	829	630	586	Wilcoxon Signed Ranks
Adapted NCI	826	628	584	Paired T Test
Nature Disconnection	826	628	584	Wilcoxon Signed Ranks
Care and Concern for the Environment	826	628	584	Paired T Test
Wellbeing SWEMBWS	833	637	592	Paired T Test
Wellbeing Resilience	831	637	591	Wilcoxon Signed Ranks
Engagement in Learning	831	632	588	Wilcoxon Signed Ranks

[3] Unlike non-parametric tests, parametric tests assume normal distribution around the mean

Teacher survey

Design and administration

A custom teacher survey was collaboratively designed with ImpactEd Evaluation to measure the impact of the OWL residential on school outcomes. These surveys focused on pupil outcomes, teacher confidence and school outcomes, with pupil outcomes and teacher confidence measured at two timepoints, pre and 6 weeks post visit, and school outcomes just 6 weeks post visit. See Appendix 2 for the full teacher survey.

Sample

Table 2: Sample Size of Teachers

Participants	Pre-visit	6-weeks
55	43	31

Table 2 shows the total number of participating teachers and the number of responses at each time point. Only 12 matched responses were available, therefore means were calculated using unmatched responses; the findings therefore should be viewed in this context.

Analysis

Averages for each of the outcomes across timepoints were produced. Percentage changes were also calculated between pre-visit and 6-week scores. Statistical significance was not conducted.

Survey for Outdoor Learning Centres (OLCs)

Design and sample

The Trust designed a 9-question survey to assess impact on Network Building outcomes. This was administered at the end of the OWL for 2023-24 to all 9 leads at the OLCs. See Appendix 2 for the full OLCs survey.

Analysis

Graphical representations were made for questions with quantitative results, and thematic analysis was conducted for the qualitative questions. Statistical significance was not conducted.

Qualitative Methods

The primary and most prevalent sources of the qualitative data came from pupil postcards (n=338), verbatim pupil reflections (n=163) captured by OLC practitioners towards the end of an OWL, open ended questions in teacher surveys (n=31), and semi-structured interviews with teachers (n=23). It should be noted that the qualitative data collected neither reflects the whole sample, nor was it subject to random sampling (see Limitations).

Thematic analysis was used to interpret and present the qualitative data, adopting a deductive approach in recognition of the fact that our evaluation framework and 4 key pillars imposed a lens through which the data was observed. However, within the pillars, the analysis was inductive, given that the subthemes derived from codes emerging from the data rather than using pre-imposed coding.

Our analysis also references the qualitative data captured in Year 2 allowing for comparison and contrast across these time periods.

Fig. 2: Pupil Postcard completed on the final evening or last day of an OWL

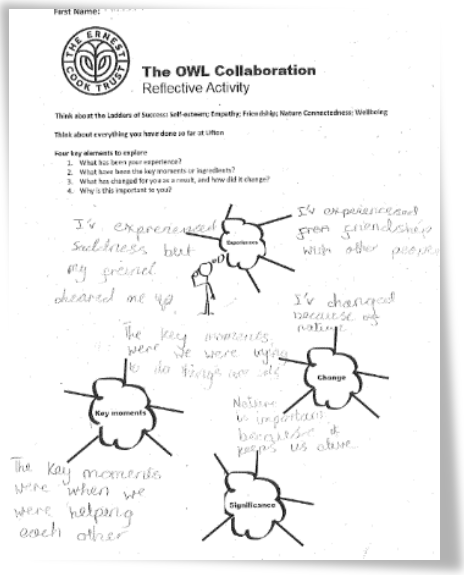


Fig. 3: Pupil Reflections following a group activity

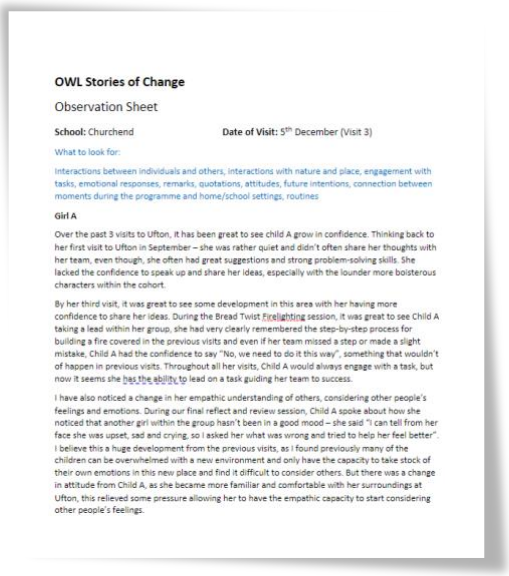


Fig. 4: Extended Teacher Observation

Teacher interviews employed a semi-structured format. This meant that the interview guide included questions to be asked but the moderator could be flexible with the exact wording and prompts. It also included a variety of "probe" questions. While the moderator is expected to steer the conversation in the intended direction, interviewees are largely free to explore different topics.

Semi-Structured Teacher Interview Questions

- Tell me about your week.
- Have you noticed any changes or shifts in the pupils during the week?
- Why did your school choose this type of farm/ nature-based visit as opposed to another type of outdoor residential?
- Is there anything else you'd like to tell me about this experience?

3.3 Limitations

There are some limitations with this evaluation that should be considered when assessing its findings:

- **Data accuracy:** Whilst improvements in data accuracy have been introduced in Yr 3, with the completion of the post-visit surveys onsite, the environment in which programme participants complete the surveys is subject to considerable variation across time, setting and experience.
- **Data significance:** The scope of this evaluation meant that statistical significance testing at sub group level was not possible.
- **Teacher survey analysis using unmatched data:** Due to limited matched teacher responses (as a result of multiple teachers from the same school completing the teacher surveys). we calculated percentage changes using an unmatched sample. The change observed from pre-visit to 6-weeks should be viewed within this context.
- **Time of response:** Pupils did not take the surveys at the same time as others during an academic year due to the nature of the programme. Hence, we need to be cognizant of variations in their responses due to varying circumstances over the academic year such as holiday vs. exam seasons.
- **Custom questions:** In the absence of suitable academically validated measures, the evaluation uses some custom survey questions (see Appendix 5) although they are based on validated scales, their ability to accurately measure the outcomes is untested.
- **Despite using adapted scales to overcome the literacy and maturity barriers**, teachers of younger age groups (Years 3-6) have reported ongoing issues with pupils' understanding of language in some of the validated survey scales. This has been particularly voiced for the **Short Warwick-Edinburgh Mental Wellbeing Survey (SWEMWBS),** the future use of which is addressed in Recommendations. The SWEMWBS findings for KS2 should therefore be viewed with caution.
- **Pupil voice data:** It should be noted that the qualitative data collected through the postcards and pupil reflections neither reflects the whole sample, nor was it subject to random sampling.
- **No control group design:** This evaluation does not feature a control group. Control groups allow us to assess whether changes in pre- and post-intervention data are limited to just those individuals that received the intervention, or whether they are part of a wider background trend in the population. Without a control group, we cannot confidently conclude that these changes are associated with the intervention, rather than some other background factor. To mitigate this, we have used national benchmark data as a comparator where possible.
- **Self-reporting measures:** A large amount of the evidence collected measuring outcomes is based on self-reporting by pupils and staff members through surveys and quantitative research. This has been mitigated by triangulating with the qualitative data generated through our own teacher interviews and that provided by the Trust.
- **Not all users participated in surveys:** Not all pupils who went on an OWL residential responded to the surveys. This means the sample that responded may have something fundamentally different compared to wider cohorts, and therefore the data is subject to selection bias. Selection bias should also be considered for the teacher survey responses given that some of the teachers involved are self-selected Outdoor Learning enthusiasts.

By recognising these limitations, the evaluation findings can be understood in context, providing a balanced and transparent interpretation of the data.

3.4 Report Purpose & Audience

Purpose

The purpose of this evaluation report is to provide key stakeholders with a comprehensive and objective assessment of the programme's performance, achievements, and challenges. The report serves as a tool for decision-making, as it provides evidence-based information on the programme strengths and weaknesses, and recommendations for improvement.

The main objectives of this evaluation report are:

- **Accountability:** To assess whether the programme has met its objectives and delivered the intended results, and to hold stakeholders accountable for their actions and decisions.
- **Learning**: To identify the key lessons learned from the programme including best practices, challenges, and opportunities for improvement, and to apply these lessons to the future iteration of the programme.
- **Improvement**: To provide recommendations for programme improvement based on the evaluation findings and conclusions, and to support evidence-based decision-making.
- **Communication**: To communicate the evaluation findings and conclusions to stakeholders and to promote transparency and stakeholder engagement.

Audience

This report has been written with the following stakeholders in mind:

- **Collaborating stakeholders** including programme staff, Outdoor Learning partners, match funders, participating schools.
- **Strategic stakeholders** operating in this space who are striving for similar outcomes through the vehicle of Outdoor Learning.
- **Informing stakeholders** including future schools, potential funding partners and policy makers.

3.5 Key Evaluation Questions

1. To what extent has the programme successfully produced outcomes for young people?

   Positive outcomes for young people include:
   a. **Connection** to nature
   b. **Care** and **concern** for the environment
   c. Improved mental health and **wellbeing**
   d. Better **engagement** in learning

2. What impact has the programme had on schools and their communities?

3. What impact has the programme had on Outdoor Learning Centre partners?

4 Reach

1,233 OWL participants aged 8-18

62 Schools

54% of participants were eligible for Free School Meals (n=1052)

46% of participants were from minoritised ethnic groups (n=840)

32% of participants had Special Educational Needs (n=1052)

In Year 3, 1,233 children and young people benefitted from an Outdoor Week of Learning at one of the 13 Outdoor Learning settings in The Collaboration. This surpassed the programme's minimum target of 924 pupils by 309, achieving 133% of the key performance indicator. The programme also exceeded its target to engage 55 schools with a total of 62 education providers participating in the programme.

As in Year 1 and 2, schools were selected by the Outdoor Learning Centres (OLCs) in agreement with the Trust using an eligibility criterion to ensure that funding was targeted at children and young people experiencing different forms of disadvantage as well as demographic groups which are currently underrepresented in terms of equity of access to nature.

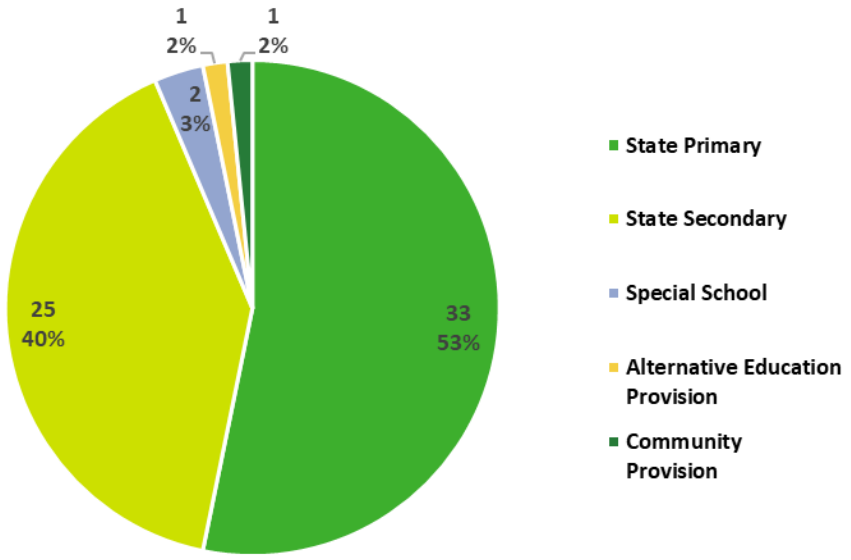


Fig. 5: OWL schools by type

Figure 5 indicates that the programme partnered with a variety of schools and engaged with children and young people across the primary and secondary age range. In comparison to Year 2, engagement from specialist schools and community provisions fell from 22 % (12 institutions) to 6% (4 institutions) of overall reach, an outcome discussed further in **Recommendations**.

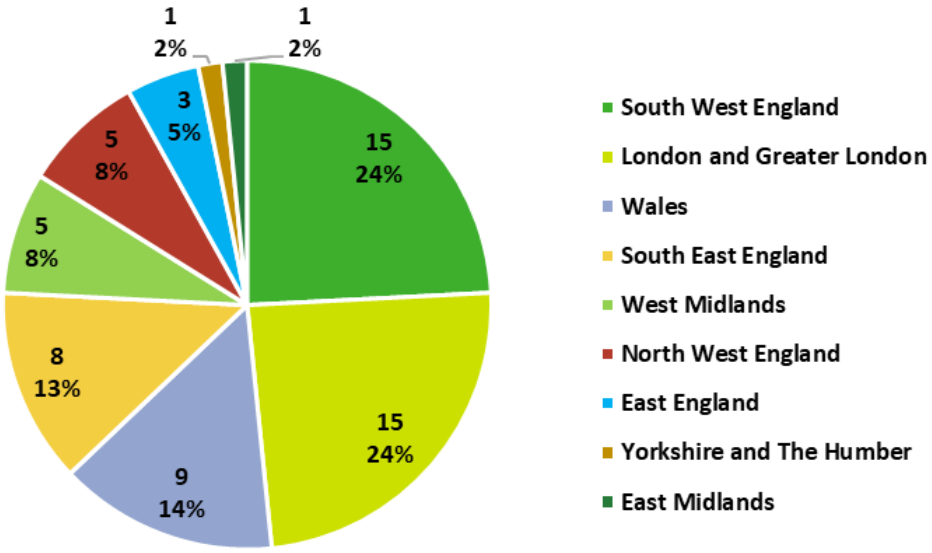


Fig. 6: OWL schools by location

Figure 6 reflects the geographical scope of the programme, with the extended reach of Year 2 sustained. 14% of schools were from Wales, with remaining schools located in urban city, rural and coastal areas across England (24% within the London and Greater London area). There was a marked increase of schools in deprived areas accessing the programme in comparison to Year 2 with **69% of schools from the top 30%** (IMD[4]: 2019 and WIMD[5]: 2019) most deprived areas in England and Wales (+16% on Year 2), with 52% of these in the top 20% (+11%) and 26% (+ 8%) in the top 10% most deprived areas.

Demographic data indicates that the programme continues to reach children and young people from lower socio/economic backgrounds, higher levels of SEND and minority ethnic heritage. 54% of participants were eligible for Free Schools Meals compared to the current national average of 24% (DOE: 2024) (n=1052). Additionally, 32% (n=1052) of participants had Special Educational Needs compared to the national average of 18% (DOE: 2024) whilst 46%[6] of OWL participants were of minoritised ethnic heritage compared to the wider population figure from the 2021 census of 18% (ONS: 2022).

[4] Index of Multiple Deprivation (England)
[5] Welsh Index of Multiple Deprivation
[6] Based on the data available for 804 OWL participants.

5 Findings

5.1 Pupil Outcomes

6 weeks after an OWL…

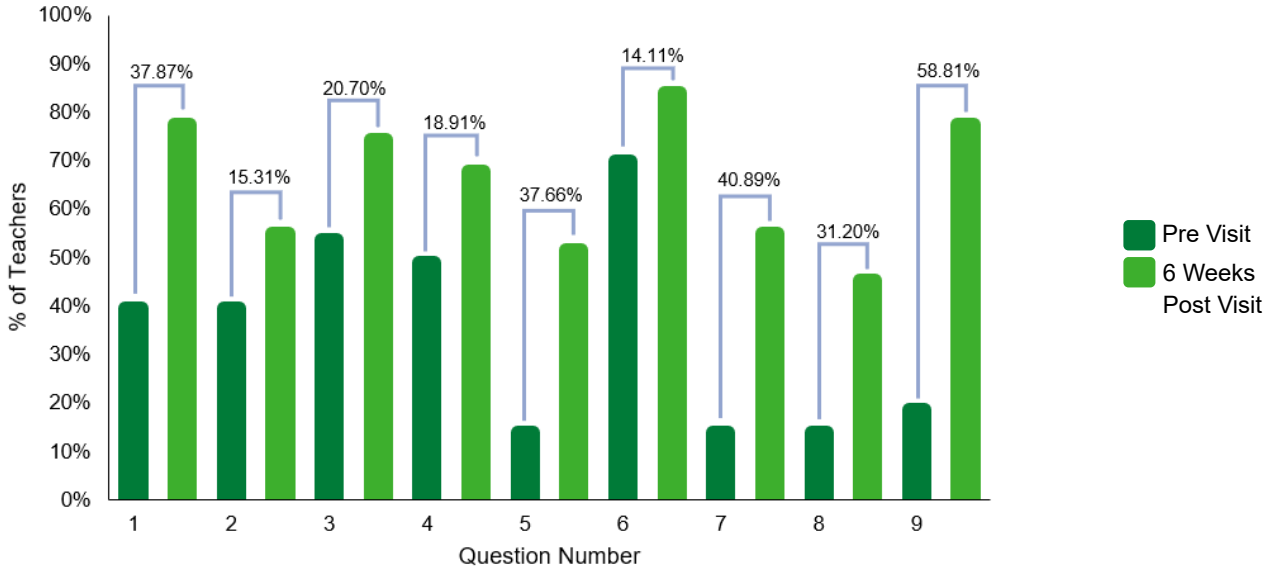
86% of teachers said most or all their pupils wanted to spend time outside **(↑ 14%)**

78% of teachers said most or all their pupils were showing positive environmental behaviours **(↑ 59%)**

76% of teachers said most or all of their pupils had positive interactions with their peers **(↑20%)**

78% of teachers said most or all their pupils were engaged in learning **(↑ 38%)**

Overall Pupil Outcomes-Teacher Survey



Pupil Outcomes Statements

1) My pupils are engaged in their learning at school
2) My pupils are cooperative in lessons
3) My pupils have positive interactions with their peers and teachers
4) My pupils are generally feeling optimistic
5) My pupils are able to deal with difficulties without too much stress
6) My pupils want to spend time outside
7) My pupils initiate conversation about nature/outdoors with me or their friends
8) My pupils are concerned about the environment
9) My pupils show positive environmental behaviours (e.g., picking up litter)

Fig. 7 Teachers who selected most of or all of their pupils when rating the pupil outcomes statements (above). The blue lines show the pre-6weeks post visit percentage changes. Pre Visit n=43, 6 Weeks Post Visit n=31

5.1.1 Nature Connection

Key Findings

- Pupils report a sustained **statistically significant increase in nature connectedness (**p<0.0001).
- Pupils in **KS3** (age 11-14) experience the **greatest shift** in nature connectedness **(27%)** which is sustained at post six weeks (16%).
- **KS3 & 4 reflections** correlate the **time spent outdoors on an OWL** with feelings of 'joy' and 'peace' which are juxtaposed with **time spent indoors at home.**
- Teacher surveys at the post 6-week stage show a **41% rise** in educators stating that most or all of their pupils '**initiated conversations about nature**/ outdoors' and 86% of teachers stating that most or all of their pupils wanted to spend time outside (+14%).

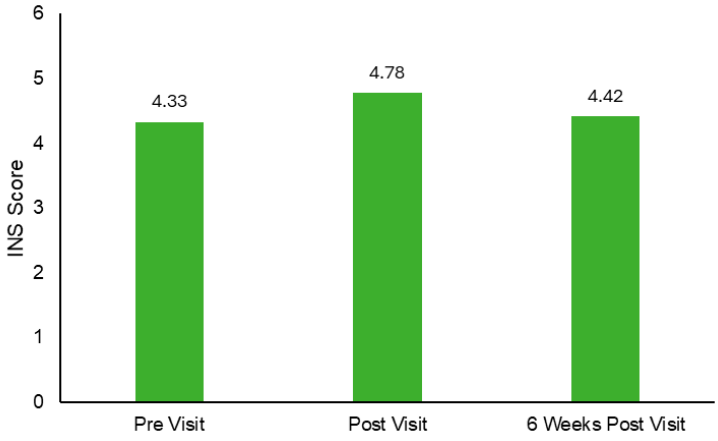


Fig. 8: Inclusion of Nature in Self (INS, aka Wesley Schultz) scores of OWL participants (p<0.0001, n=586)

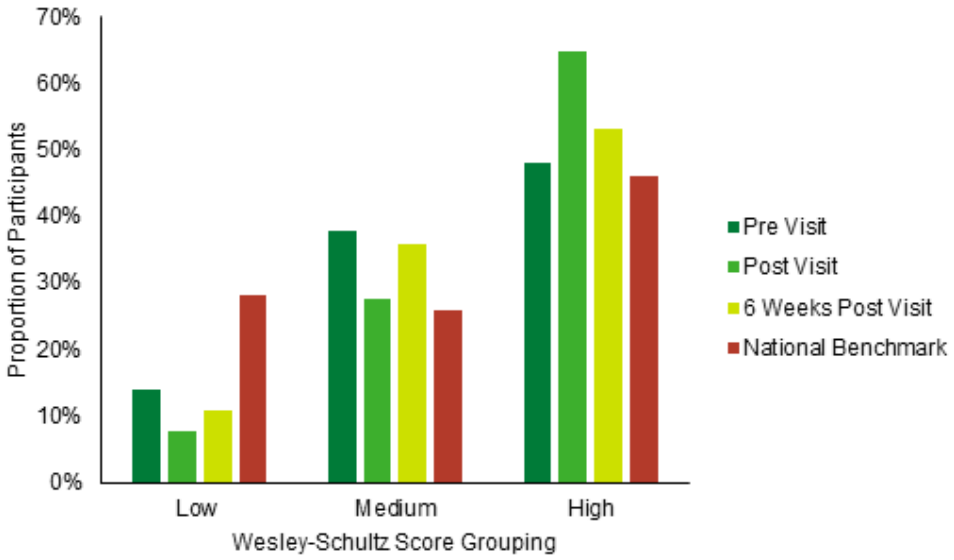


Fig. 9: Proportion of OWL participants' INS scores classified as having low (1-3) medium (4) and high (5-7) nature connectedness, compared to the national benchmark.

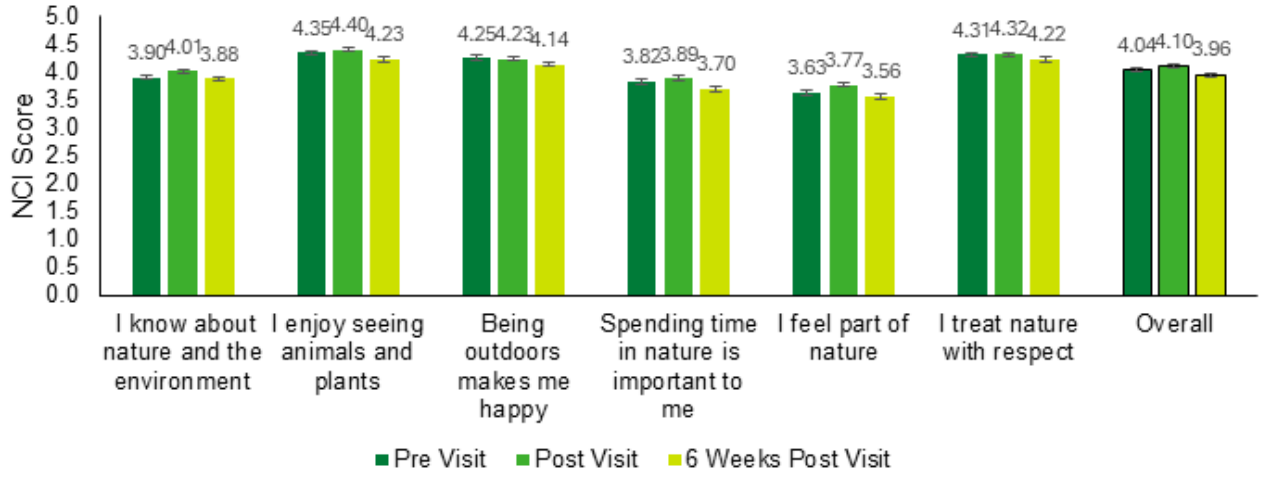


Fig. 10: Nature Connectedness Index (NCI) scores of OWL participants, by question and the overall score.

A paired T-test showed the pre-post change to be statistically significant n=584, p=0.00).

Disconnection (“I find Nature scary”)

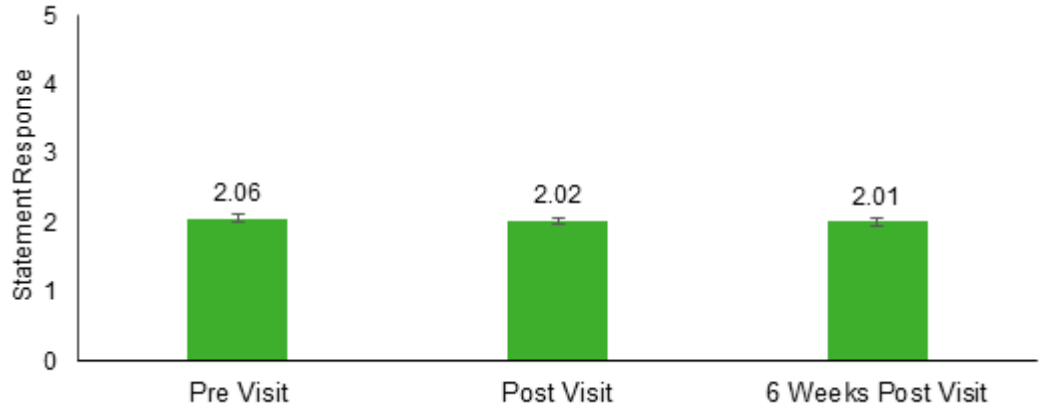


Fig.11: OWL participant responses to the Nature Disconnection statement “I find Nature Scary.”

Note, a low score here is a positive result. A Wilcoxon signed-rank test showed no significance between pre-post scores (n=584, p=0.46).

Nature Connection: Discussion

Connection

Findings from the INS (See Fig.8) **indicate a statistically significant increase in nature connectedness** following an OWL **which is sustained at the post 6-week stage.** This builds on Year 1 & 2 outcomes, where statistically significant positive change was only evident immediately following an OWL.

Analysis against the national benchmark (See Fig 9) also sees **positive shifts with 65% of** participants completing an OWL with **high levels of nature connectedness compared to the national benchmark of 46%**. This represents a considerably higher outcome than Year 2 where 44% of pupils self-reported with high levels of inclusion of nature in self.

A notable finding is the higher-than-expected baseline scores for nature connectedness among participants (Fig. 9), with 48% of the cohort starting in the "High" category compared to the national benchmark of 46%, and only 14% in the "Low" range. This stands in contrast to Year 2, where 40% of participants fell into the "Low" category and only 34% in the 'High' category. These elevated starting scores are unexpected and could reflect specific shifts at subgroup level or broader trends not yet fully explored.

Sustained nature connectedness (INS) at post 6 weeks suggests that **some transformative elements of an OWL endure beyond the residential visit** which is reinforced by the rich stories of nature connection reflected in pupil feedback. This is also supported by teachers' observations at the post 6-week stage with teacher surveys showing a **41% rise** in educators stating that most or all of their pupils **'initiated conversations about nature/ outdoors'** and **86%** of teachers stating that **'most or all of their pupils wanted to spend time outside.'**

While the INS results highlight sustained benefits, the NCI analysis (Fig. 10) shows a decline in scores six weeks post-visit, falling below pre-visit levels. This discrepancy raises important questions: it could reflect differences in measurement sensitivity, participant recall bias, or a natural tapering of impact over time. Aligning with studies by Richardson et al. (2019) and DeVille et al. (2021), these findings also highlight the need for ongoing reinforcement through regular, meaningful exposure to nature to maintain initial gains (Richardson, M., 2019; DeVille, N.V., et al, 2021).

Disconnection

Responses to the statement "I find Nature Scary" (Fig.11) remained consistent pre, post and 6 weeks post visit, decreasing an insignificant amount. It should be noted that the score for this measure was very low to start with, indicative of a ceiling affect. The low score and correspondingly flat outcome suggests that phobia does not feature highly in OWL pupils' experience of nature disconnection. Phobia-related commentary is also an outlier in the qualitative data with more pupils mentioning disconnection due to the habit of spending time indoors as opposed to outdoors.

Subgroup Analysis

Fig. 11: Proportion of OWL participants' INS scores classified as having low (1-3) medium (4) and high (5-7) nature connectedness, compared to the national benchmark.

Subgroup

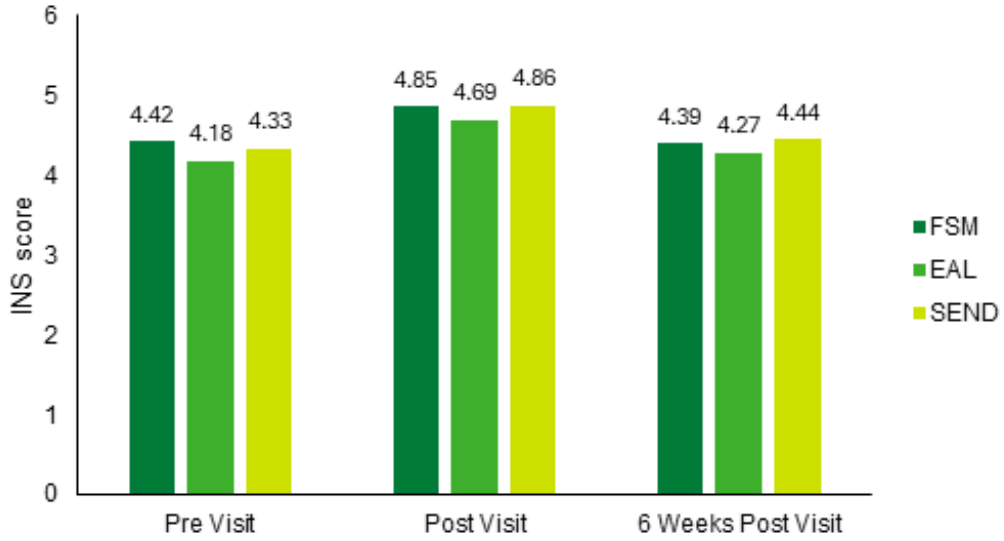


Fig.12: INS scores of OWL participants who have Free School Meals (FSM, n=311), English as an Additional Language (EAL, n=173) or Special Educational Needs and Disabilities (SEND, n=181).

Fig. 13: INS scores of OWL participants in Key Stage 2 (n=484), Key Stage 3 (n=79), and Key Stage 4 (n=23).

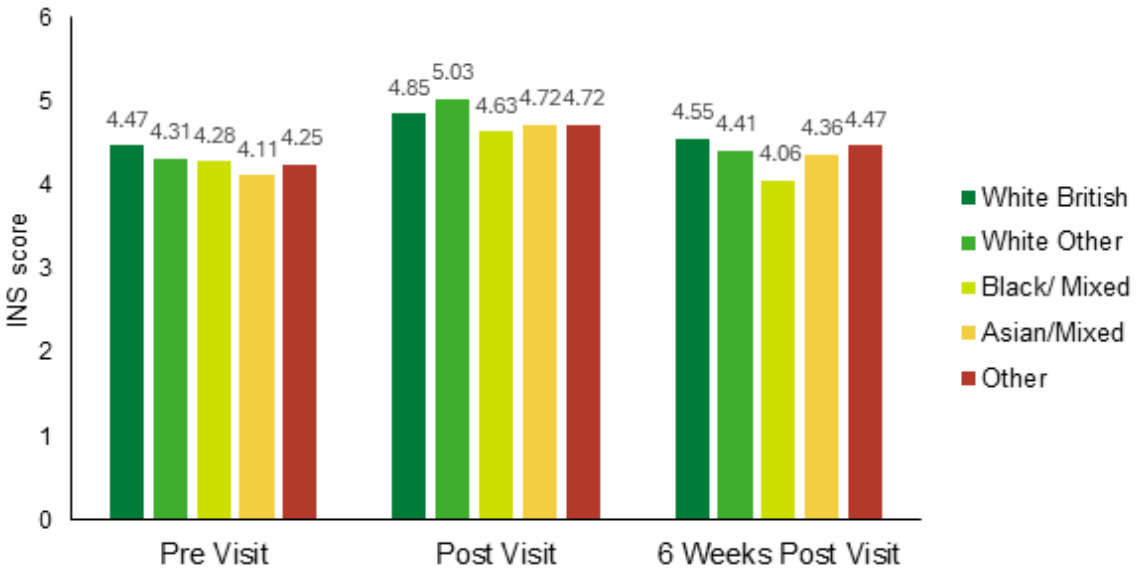


Fig. 14: INS scores of OWL participants by ethnicity. (White British, n=201; White Other, n=39; Black/Mixed, n=126; Asian/Mixed, n=61; Other, n=32)

Baseline differences and socioeconomic factors

Interestingly, pupils eligible for FSM began with a higher baseline nature connectedness score (4.42) compared to the cohort mean (4.33) (Figure 12). This finding challenges assumptions that low socioeconomic status correlates with lower nature connection, aligning with Richardson et al. (2022), who found that higher incomes can be moderately associated with lower nature connectedness. This result warrants further exploration to better understand the relationship between socioeconomic status and nature connectedness.

Age-related dynamics

KS2 responses begin at a considerably higher baseline than KS3 and KS4 scores (see Figure 13) which significantly affects the unusually high baseline scores in Year 3. The smaller post-intervention gains (8% compared to the overall 10.5%) for this age group are likely influenced by ceiling effects, as their higher starting scores left less room for measurable improvement.

This supports the wider evidence base that the highest scores for inclusion of nature in self is found in younger cohorts (Liefländera., et al 2013) and nature connectedness has been found to decline with age into the early teens, then level off (Price et al., 2022).

Richardson et al. (2019), observed a notable drop in nature connectedness from the ages 10 to 15, and theorised that a child transitioning into adolescence may temporarily discount the importance of nature until they are sure in their own identity and character, particularly in a technologically driven age. The sharp pre-post increase (27.1%) which was sustained at post-6 weeks (16%) among KS3 adolescents aligns with Richardson et al. (2022), who identified a negative correlation between smartphone use and nature connectedness. By limiting smartphone access during the OWL, the intervention may offer a rare opportunity for disconnection from technology, fostering a reconnection with nature. This finding highlights the importance of screen-free, immersive outdoor experiences, particularly for this age group.

KS4 participants also demonstrated a significant pre-post increase (20.7%); however, the small sample size (n=23) limits the generalisability of these findings. Future evaluations should aim for larger cohorts to strengthen confidence in these results.

Ethnicity and cultural associations

The greatest increases in nature connectedness were observed among pupils in the White Other group (Figure 14), supported by teacher feedback highlighting Ukrainian, Bulgarian, and Polish pupils reconnecting with familiar rural activities. Teachers described this as fostering a positive class dynamic, with peers seeing these pupils as ‘mini-experts'.

The smaller increase in nature connectedness among Black/Mixed pupils and its decline at 6 weeks post-intervention may point to deeper structural and historical barriers to nature engagement and perpetuated by current societal inequalities (Hayes and Moses, 2024). Future initiatives could explore culturally sensitive approaches to Outdoor Learning that foster safety, inclusivity, and belonging for underrepresented groups, addressing both historical and contemporary challenges.

"Being outdoors made me scared at first, but I got over it and I loved it."

KS3 OWL Pupil

Qualitative Insights

Pupil testimony and teacher observations give a rich picture of qualitative shifts towards nature connection. Some of the themes presented in our first Core Story reel A Journey Towards Nature Connection (Figure 15) emerging from the Year 2 data are again salient. Figure 16 illustrates the prevalent words from pupil postcards which notably speak to the themes of joy and peace with 'happy' (n=194), 'calm' (n=82) , and 'relaxed' (n=44) occuring most frequently in descending order.

Fig.15: Key themes from Core Story 1: A Journey Towards Nature Connection

Fig.16: Word cloud using the statement 'Being outdoors makes me…' (n=328)

"I feel like before I was more shut in, I always wanted to stay inside…I didn't value nature as much as I did this week, so I feel like I've been a bit more connected to it."

KS4 OWL Pupil

Amongst the older age range (KS3 & 4), there is a frequency of reflection about how being outdoors and in nature brings about positive feelings and how these contrast to life at home, with a high instance of response mentioning spending significant time indoors.

Whilst most terms used by pupils in Figure 15 hold positive connotations, some associated the outdoors with being 'tired' and a small number of responses spoke to the theme of disconnection-'scared'-and apprehension-'stressed.' One pupil postcard surmised, ***"I didn't like it, it was dirty, the weather changes and I just missed the city and wanted to go home."***

Conclusion

While these results are extremely promising, both this evaluation and existing research highlight the importance of sustained effort to achieve long-term impact. Previous studies have shown that nature interventions can produce immediate gains in nature connectedness; however, these benefits often diminish without ongoing exposure and reinforcement (Bragg et al., 2015; Lumber et al., 2017). This is reflected in the decline observed in NCI scores six weeks post-intervention in this evaluation.

Ongoing engagement is therefore critical. Continued opportunities to interact with nature, combined with reflective practices and habit formation, are essential for maintaining and deepening these outcomes over time (Richardson et al., 2019). Strategies such as embedding nature-based activities into daily routines, integrating Outdoor Learning (OL) into the school curriculum, and providing consistent follow-up opportunities can help reinforce these transformative experiences (McKinlay et al., 2024).

These findings also illustrate the significant, yet varied, impacts of the OWL residentials on different subgroups. While gains in nature connectedness are encouraging, particularly among adolescents, sustaining these outcomes requires targeted strategies. Regular opportunities for nature engagement, culturally inclusive approaches, and further exploration of socioeconomic and age-related trends will be critical to maximising the long-term benefits of Outdoor Learning experiences.

In conclusion, while the OWL residentials demonstrate clear and significant immediate and short-term impacts on nature connectedness, ensuring these outcomes endure requires a commitment to sustained, meaningful nature engagement. This underscores the value and importance of the broader Network initiative to embed Outdoor Learning as a fundamental aspect of school pedagogy. By fostering a consistent culture of Outdoor Learning and providing regular, nature-based experiences, schools can amplify the gains achieved through residential programmes. This approach not only strengthens pupils' long-term connection to nature but also reinforces the value of ECT's funding-plus model and its additional support for schools to enhance and embed their Outdoor Learning offer.

5.1.2 Care & Concern for the Environment

Key Findings

- An OWL intervention produces a **statistically significant short-term increase (**p=0.04**)** in pupils' care and concern for the environment.
- **Normalising conversations about nature remains a challenge** for all age groups.
- There is a strong qualitative indication that an OWL helps pupils develop **positive intentional behaviour** towards the **environment** which is supported quantitative observation 6 weeks post OWL with 78% of teachers stating **most or all their pupils were showing positive environmental behaviours-an increase of 58%.**
- Pupils in **KS3** (age 10-14) start with the lowest baseline and experience the greatest positive shifts.

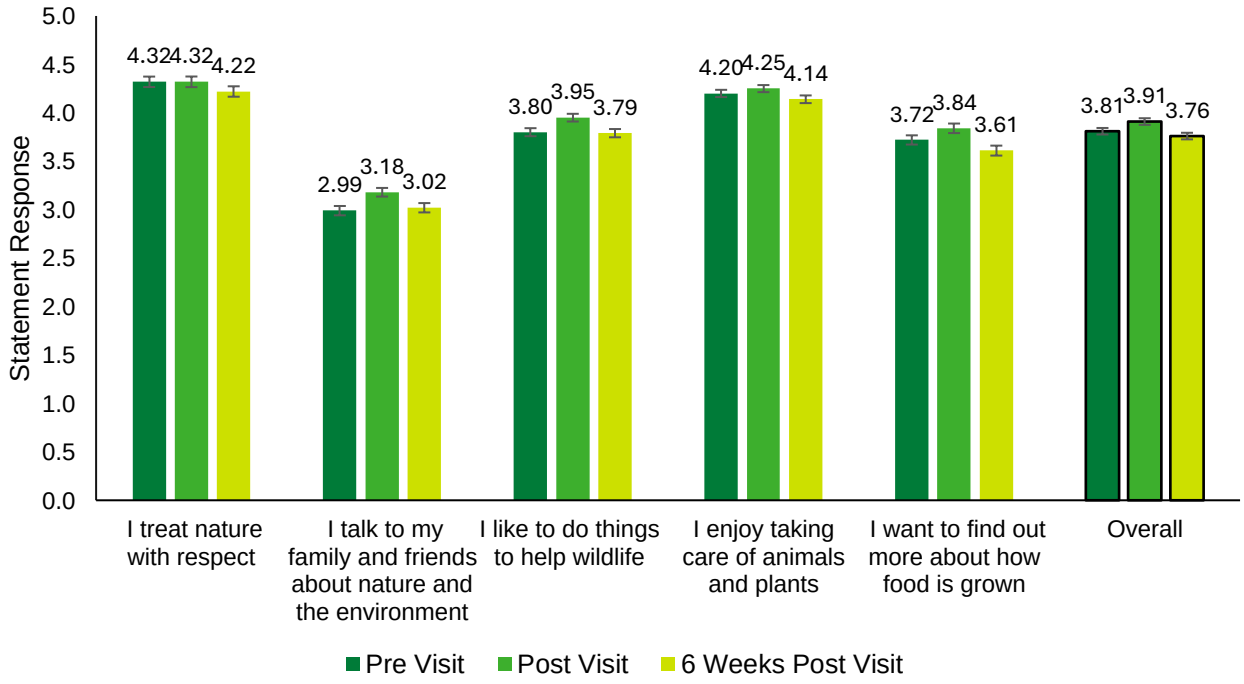


Fig. 17: Responses of OWL participants to the custom statements related to Care and Concern for the Environment by question and the combined score. A paired T-test showed the pre-post change to be statistically significant (n=584, p=0.04).

Subgroup Analysis

Age-related differences: KS3 pupils (ages 10–14) began with the lowest baseline scores but experienced the largest pre-to-post visit gains (8.4%; Figure 18), reflecting the potential for OWLs to re-engage this age group with nature. In contrast, KS2 pupils exhibited the smallest change (8%) due to higher baseline scores, indicative of a ceiling effect.

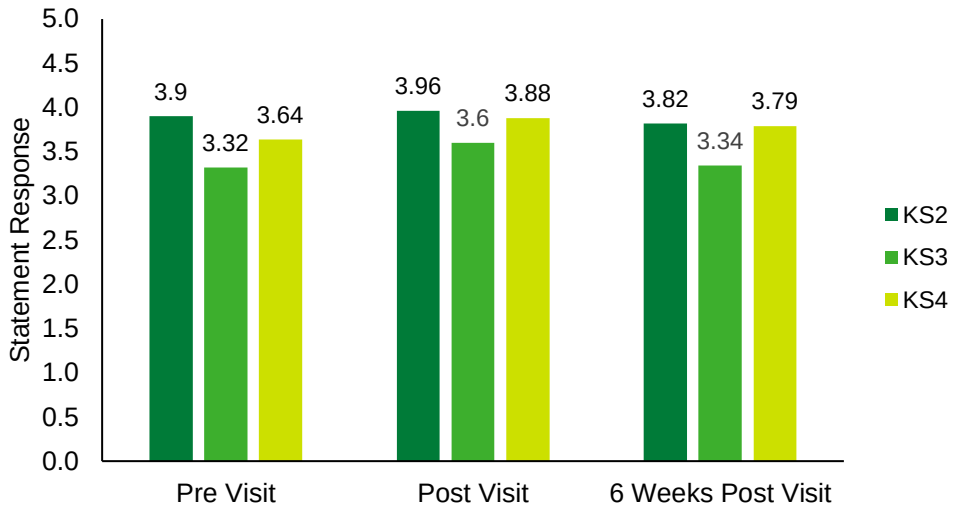


Fig.18: Responses of OWL participants in Key Stage 2 (n=482), Key Stage 3 (n=79), and Key Stage 4 (n=23) to the custom statements related to Care and Concern for the Environment.

"This week has really helped widen horizons." ***OWL Headteacher***

Qualitative Insights

Emerging themes from pupil reflections (Figure 19)—such as nature appreciation, food provenance, and a desire to care for animals and reduce pollution—align with the *Meaning and Compassion* Nature Connection Pathways[7]. These reflections suggest that OWLs create intentional space for pupils to consider their role in the natural world and foster pro-environmental attitudes.

Many responses within the *'Care'* theme indicate a sense of enthusiasm, agency, and future intention, which is echoed in teacher feedback six weeks post-visit. Teachers note that activities such as field-to-fork experiences, habitat building, and tree planting encourage conversations about conservation and pro-environmental behaviours, helping pupils develop new insights, broaden their understanding, and make meaningful connections. As one teacher observed:

"The children are even more keen to take part in our Forest School activities and thrive in outdoor learning opportunities. The children seem keener to take risks."

Challenges

Despite these positive outcomes, some teachers report barriers, particularly among KS3 pupils, where environmental behaviours may be perceived as 'uncool.' Peer dynamics and social norms appear to influence pupils' willingness to openly engage in pro-environmental behaviours, as one teacher shared:

"Some of my students have said that they like to be outside but I have not seen or heard any of them respond to the environment differently such as picking up litter. Some parents have told me that they speak positively at home about their farm experience but they are guarded at school to speak positively about their visit as they feel it's not seen by their peers as 'cool'."

This feedback aligns with Richardson et al. (2019), who highlight how peer influence and identity development in adolescence can inhibit expressions of pro-environmental attitudes. To tackle this challenge, it may help to make environmental actions feel more normal and accepted among peer groups. This could include encouraging peer-led activities, providing positive role models, or creating opportunities for teamwork and collaboration during Outdoor Learning experiences.

[7] NatureMe-Booklet-2021

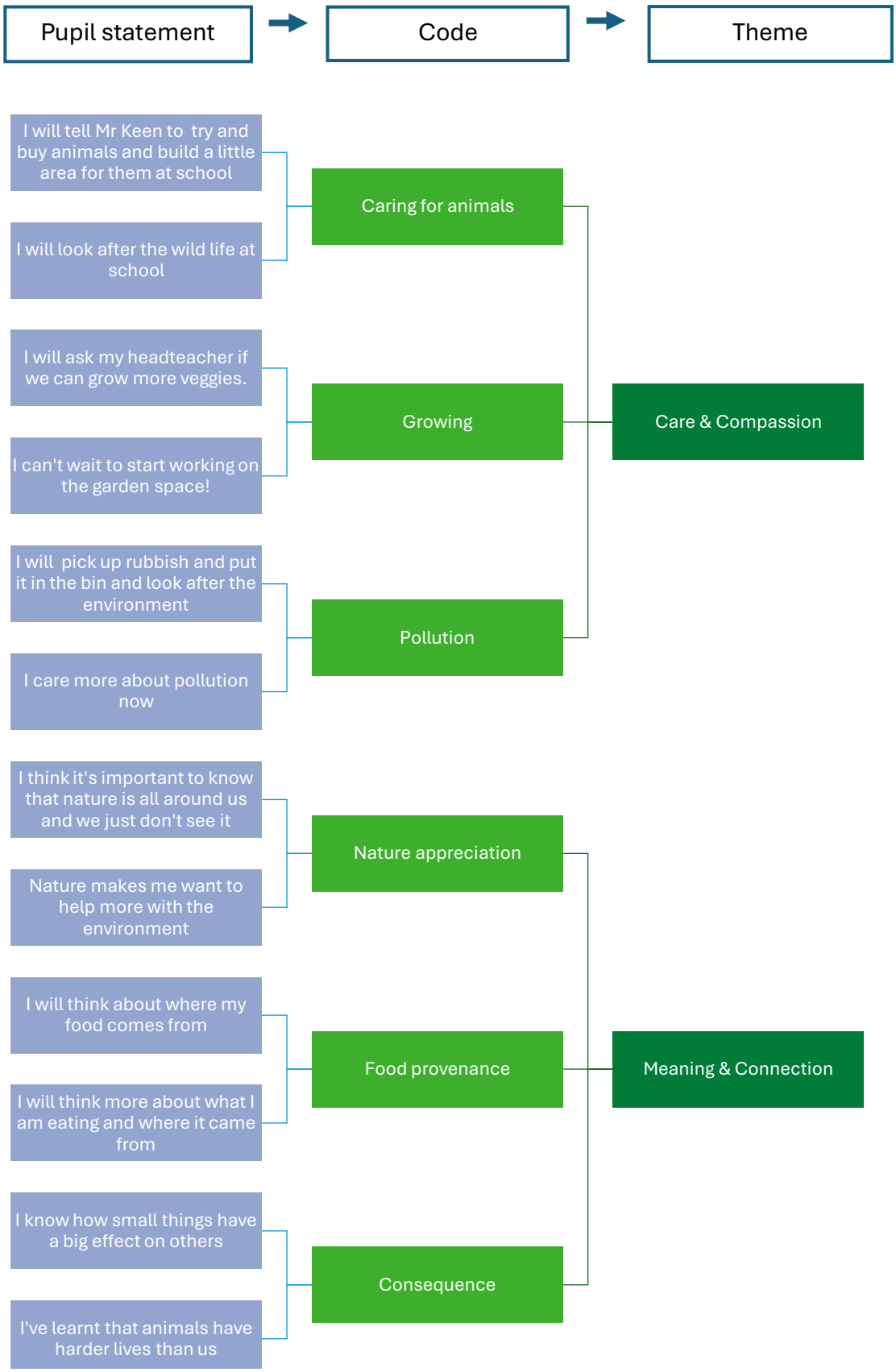


Fig.19: Care & Concern for the Environment Emerging Themes

Care and Concern for the Environment: Discussion

The pre-post result for the custom statements relating to care and concern for the environment was statistically significant, demonstrating that the **OWL has a positive impact on the pro-environmental behaviours of participants**. As with the NCI, the 6-week post visit dropped below the pre visit score, which is an unexpected result.

However, the teacher surveys, also conducted 6 weeks post visit, painted a different narrative, one where impact was maintained. There was a 31% increase in teachers who felt that most or all of their pupils "are concerned about the environment". Further, there was a **59% increase** in teachers who felt that most or all of their pupils **"show positive environmental behaviours"** - the greatest increase seen in any of the teacher-reported pupil outcomes (See Figure 7).

Mechanisms for Change

Insights from the teacher interviews suggest that the **key mechanisms of change** for this pillar are **field to fork activities, animal husbandry** tasks and the **accompanying conversations** about pro-environmental and conservation behaviours which help pupils to gain a sense of connection and consequence about their place in the natural world. Teachers observed that such activities encourage pupils to think more intentionally about environmental behaviours and make meaningful, real-world connections

An area of challenge is reflected in the statement: *"I talk to my friends and family about the environment and nature,"* which received the lowest scores among pupils. Teacher feedback supports this, suggesting that normalising conversations about nature among peers remains difficult, particularly for older pupils. This aligns with comments indicating that some students feel hesitant to openly discuss their positive experiences due to peer pressure or perceptions that caring for the environment is "uncool."

Interestingly, despite these barriers, this area saw some of the greatest increases post-visit, with gains sustained six weeks later (Figure 17). Teacher surveys reinforce this trend, reporting a ***31% increase*** in teachers who felt that *most or all* of their students "initiated conversations about nature/outdoors" with teachers or peers (Figure 7). This suggests that while challenges persist, the OWL creates important opportunities for pupils to begin these conversations, even if they remain cautious about fully engaging in peer settings.

Conclusion

Overall, the findings indicate that the OWL experience positively influences pupils' care and concern for the environment, with some increases in pro-environmental attitudes and behaviours observed. While immediate quantitative results suggest a decline over time, qualitative data from teachers and pupil feedback provide a more nuanced picture, indicating that key impacts are maintained, particularly through practical activities that foster connection and consequence. Addressing barriers to peer conversations—such as through peer-led activities or collaborative reflection—could help normalise pro-environmental discussions and further embed these behaviours over the longer term.

5.1.3 Wellbeing

Key Findings

- The OWL intervention produces a **significant improvement in pupils' self-reported wellbeing**, with scores moving from slightly below to above the national benchmark. This change was statistically significant ($p<0.0001$) in pre-to-post measures. However, the pre-to-six-week post scores showed no significant difference, suggesting that the initial gains in wellbeing may not have been sustained over time.
- Pupils in **KS3** experience the greatest positive shifts in self-reported wellbeing (**11.8%**) which is **sustained six weeks post.**
- There is a **positive correlation** between the nature connectedness of OWL participants and a positive effect on their self-reported wellbeing (Pearson's Co-efficient).
- An OWL leads to **increased resilience for all cohorts**, with the most significant and sustained impact observed among pupils in the EAL group.
- Both **eudaimonic wellbeing** and **social connection** emerge as strong themes with time away from screens, teamwork and ownership of tasks suggested as key mechanisms of change.

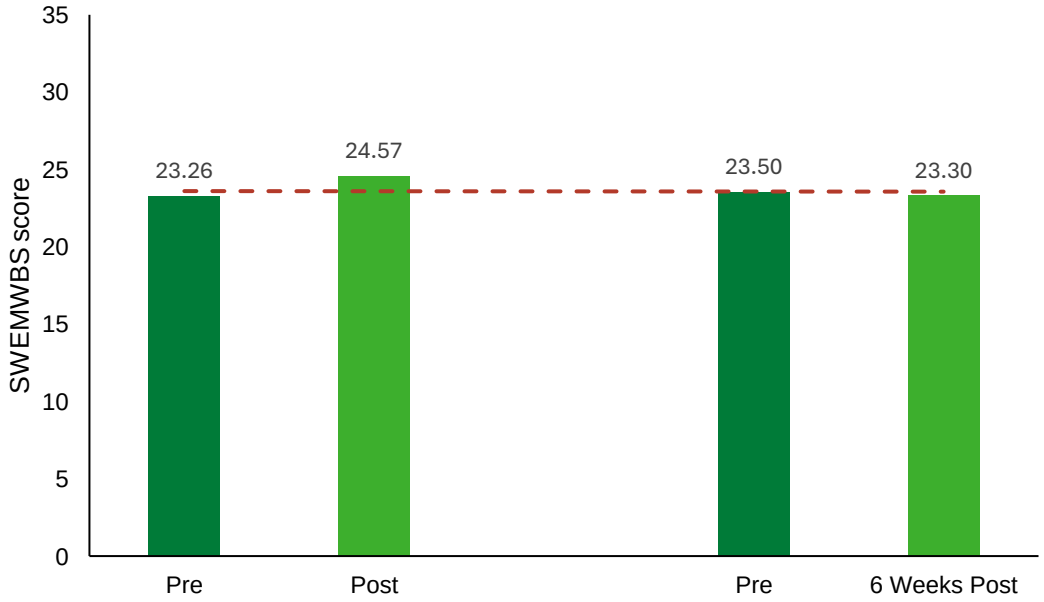


Fig.20: Unmatched responses to the Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMBWS), red line indicates the National Benchmark (23.6: Ng Fat et al., 2017). A Wilcoxon Signed Ranks test showed the pre-post change to be statistically significant (n=833, $p<0.0001$). A paired T-Test showed no significant difference in the pre-6 weeks post scores, (n=637, $p=0.28$).

Resilience

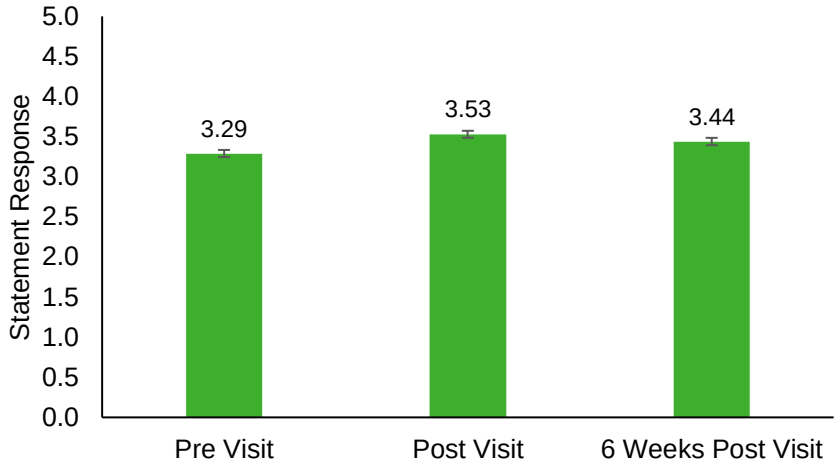


Fig.21: Responses of OWL participants to the resilience statement "I tend to bounce back quickly after hard times." A Wilcoxon signed-ranks test showed the pre-post change to be statistically significant (n=591, p=0.01). 7.3% sustained at 4.6% post-6 weeks

Subgroup Analysis

SWEMBWS

Key stage differences: Pupils in KS3 exhibited the largest gains in wellbeing (Figure 22), with an 11.8% increase in self-reported scores. While the precise reasons behind this improvement are unclear, it may reflect the intervention's effectiveness in addressing the unique developmental needs of adolescents. This age group often faces heightened social and emotional challenges, including identity formation, peer pressures, and reduced connection to nature (Richardson et al., 2019), which may make them particularly responsive to the structured and immersive experiences provided by the OWL residentials.

KS2 pupils showed smaller gains in wellbeing (4%), likely due to a ceiling effect, as previously discussed. Additionally, the SWEMBWS, designed for individuals aged 11 and older, is not formally validated for younger participants. This may have affected the accuracy of results for KS2 pupils, as comprehension, literacy, and developmental maturity could influence their ability to fully engage with the survey. As a result, the current tools may not fully capture the true impact of the intervention on this age group.

Measuring wellbeing outcomes for KS2 remains a contested area of research, with few validated scales available for children under the age of 9. Future evaluations may benefit from exploring alternative tools specifically suited to younger age groups, such as those recommended in the *Wellbeing Measurement Framework for Primary Schools* by the Anna Freud National Centre for Children and Families. These tools could provide a more accurate and reliable assessment of wellbeing outcomes for KS2 pupils.

While all ethnic groups benefited from the intervention to some extent (Figure 23), the sustainability of gains varied, with the White Other group showing the most consistent improvement over time. This suggests that personal or cultural familiarity with nature may influence the durability of wellbeing outcomes.

The decline in scores for the Black/Mixed and Asian/Mixed groups raises important questions about barriers to sustained impact. Research has shown that structural inequalities, cultural perceptions of nature, and access to green spaces can all influence how different groups experience and engage with nature-based interventions.

	Pre	Post	Pre	6 Weeks Post
KS2	23.72	24.66	23.78	23.48
KS3	21.69	24.25	21.84	22.52
KS4	22.63	24.59	22.69	21.91

Fig. 22: Unmatched responses to the Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMBWS) of OWL participants in Key Stage 2 (pre-post n=625, pre-6 weeks post n=532), Key Stage 3 (pre-post n=163, pre-6 weeks post n=80), and Key Stage 4 (pre-post n=44, pre-6 weeks post n=25). Table below graph illustrates the data points.

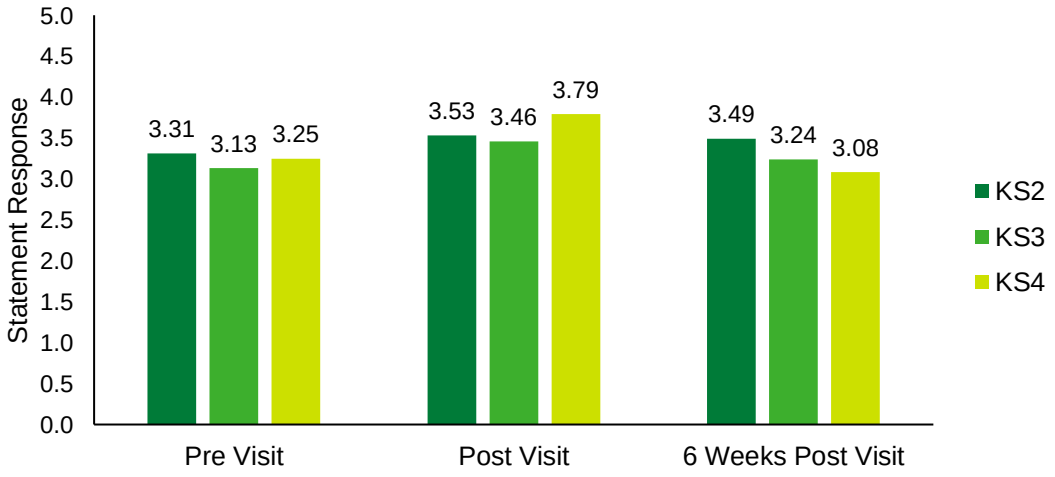


Fig.23: Responses of OWL participants in Key Stage 2 (n=487), Key Stage 3 (n=80), and Key Stage 4 (n=24) to the resilience statement “I tend to bounce back quickly after hard times”.

Resilience gains in EAL cohort: Resilience scores showed a significant improvement (p=0.01) for all cohorts (Figure 24), with the EAL group experiencing particularly strong and sustained gains of 5% post visit and 8% at the post 6-week stage. This suggests that the combination of nature-based

activities, teamwork, and shared experiences may be especially impactful for pupils facing additional social or linguistic challenges.

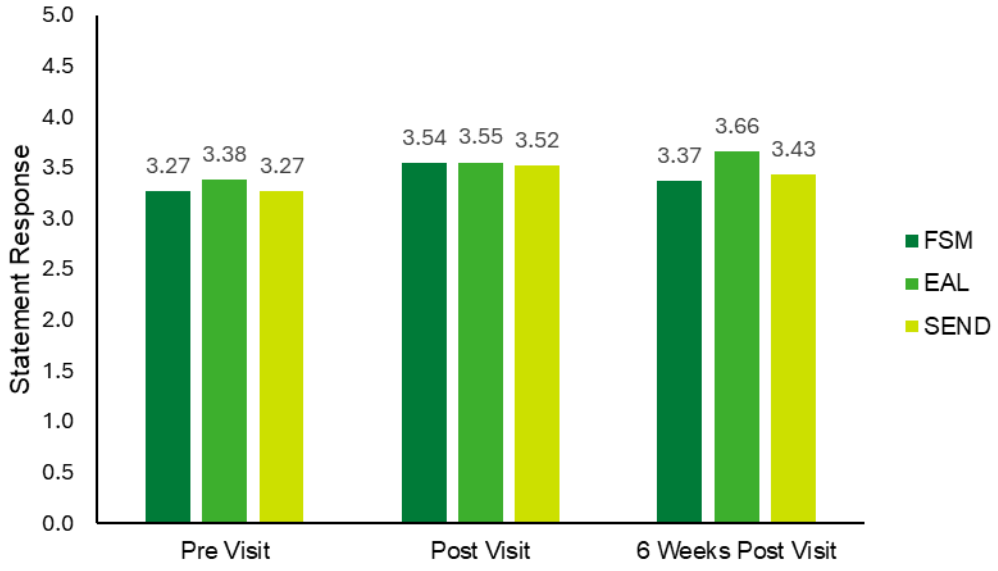
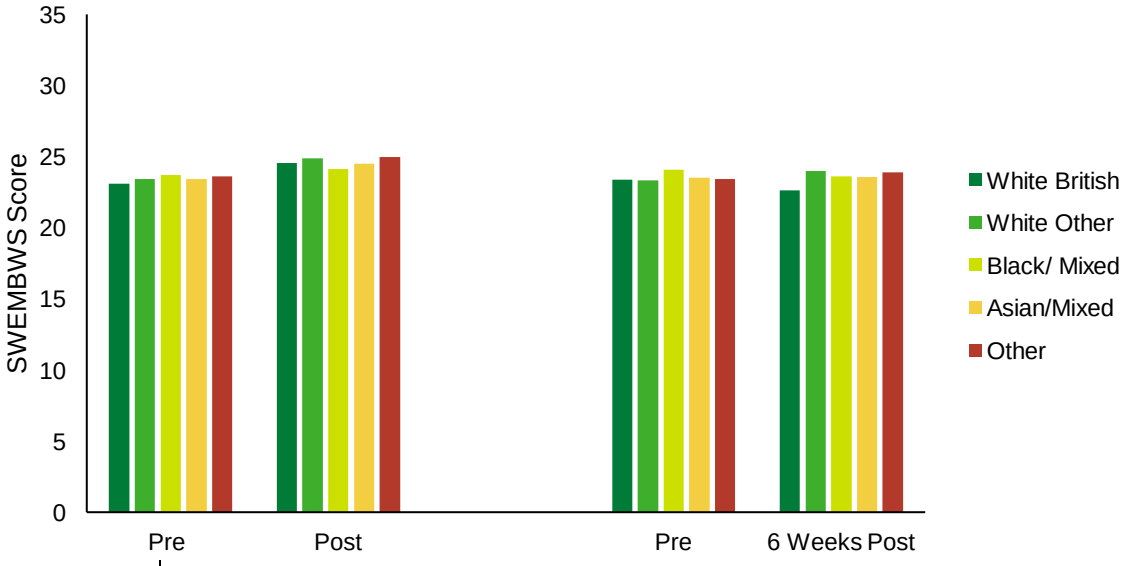


Fig.24: Responses of participants who have Free School Meals (FSM, n=314), English as an Additional Language (EAL, n=174) or Special Educational Needs and Disabilities (SEND, n=184) to the resilience statement "I tend to bounce back quickly after hard times".



White British	23.10	24.54	23.39	22.64
White Other	23.44	24.89	23.34	24.00
Black/Mixed	23.71	24.15	24.07	23.61
Asian/Mixed	23.43	24.48	23.53	23.56
Other	23.63	24.99	23.41	23.90

Fig.25: Unmatched responses to the Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMBWS) by ethnicity. Table below graph illustrates the data points. (White British, pre-post n=332, pre-6 weeks post n=234; White Other, pre-post n=58, pre-6 weeks post n=39; Black/Mixed, pre-post n=148, pre-6 weeks post n=131; Asian/Mixed pre-post n=74, pre-6 weeks post n=64; Other pre-post n=39, pre-6 weeks post n=33)

While all ethnic groups benefited from the intervention to some extent (Figure 25), the sustainability of gains varied, with the **White Other** group showing the most consistent improvement over time. This suggests that personal or cultural familiarity with nature may influence the durability of wellbeing outcomes.

The decline in scores for the **Black/Mixed and Asian/Mixed** groups raises important questions about barriers to sustained impact. Research has shown that structural inequalities, cultural perceptions of nature, and access to green spaces can all influence how different groups experience and engage with nature-based interventions.

Qualitative Insights

Hedonic and Eudaimonic Wellbeing

The recurring themes of "peace" and "joy" in both pupil and teacher feedback suggest that the OWL intervention fosters feelings of immediate pleasure, characteristic of *hedonic wellbeing*. Pupils repeatedly referenced moments of calm and happiness during their experiences, reflecting the restorative power of nature and the satisfaction derived from engaging in meaningful activities.

In addition to hedonic wellbeing, both pupil and teacher data support the well-established connection between nature engagement and *eudaimonic wellbeing* (Ryan & Deci, 2001) particularly in the realm of personal growth. Core Story 2: A Pathway Towards Personal Growth, using Year 2 and Year 3 data, illustrates the transformative impact of combining nurture, responsibility, and delayed gratification. These experiences appear to encourage pupils to challenge themselves, find a sense of purpose, and develop resilience (Fig. 26).

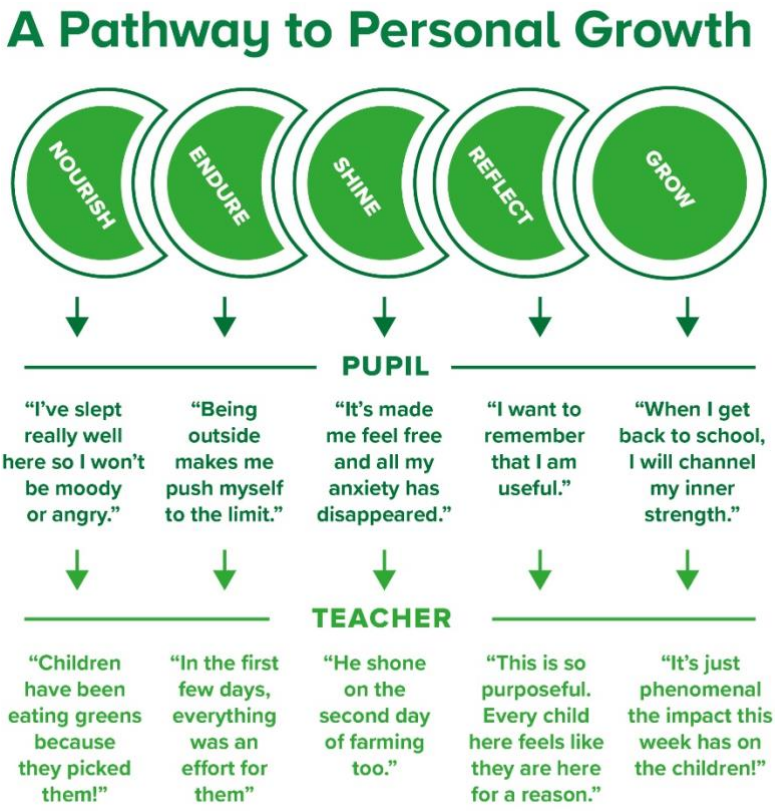


Fig. 26: Key themes from Core Story 2

One teacher described the profound impact of these responsibilities:

> "What I love about the children being on a working farm is that they're not here to be entertained. The children have responsibilities…they have to feed the animals before they feed themselves…That is a lesson they don't get anywhere else. This experience really shows them that you can get pleasure from doing something for someone else and that it a reward in itself."
>
> OWL Teacher

This narrative aligns with broader research suggesting that responsibility and contributing to others' wellbeing are key drivers of personal development and long-term happiness.

Social Connection

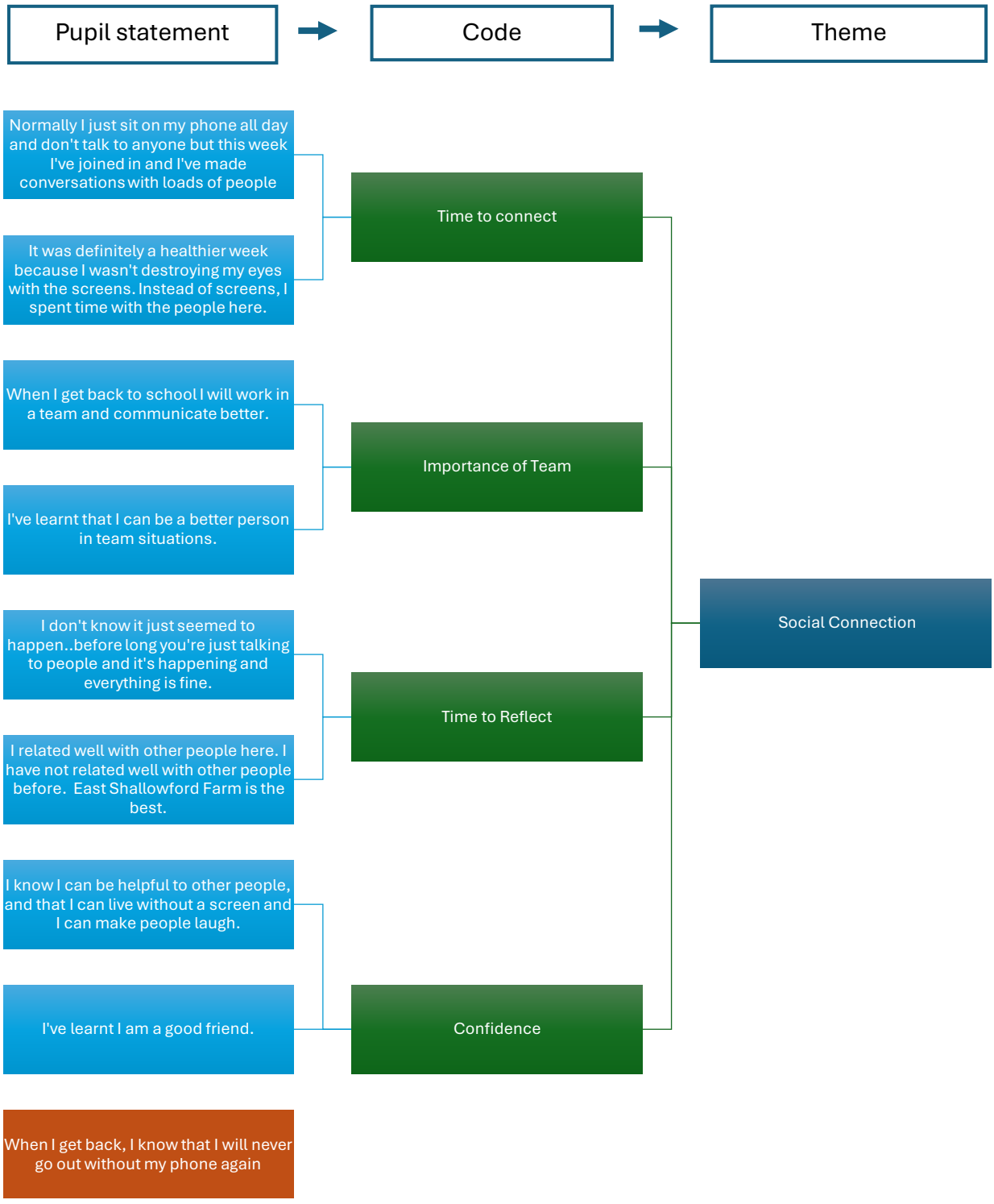


Fig. 27: Pupil data reflecting the theme of Social Connection

***"I have started sitting at the table at home when I eat my tea…My mum said I am really different at home now, but in a good way."* KS4 OWL Pupil**

The OWL experience also emerged as a powerful catalyst for fostering social connection, an integral component of pupil wellbeing. The programme's structure intentionally provides time and space for pupils to build relationships through teamwork, collaboration, and unstructured, screen-free activities. Pupil reflections illustrate the depth of these relational shifts (see quote above).

Social connection surfaced as a dominant theme in the pupil data as illustrated in Figure 27 with some pupils reflecting on the time given to develop social connection whilst others infer that structured teamwork opportunities have helped increase social confidence.

Teacher reflections at both the post and post 6-week stage (see Figure 28) echo the suggested increase in social connection and confidence and further imply that sustained, positive relational shifts have not only occurred between peers but also between teachers and pupils. This relational growth was often linked to increased engagement in learning, with some teachers suggesting that strengthened social bonds fostered greater trust and collaboration within the classroom.

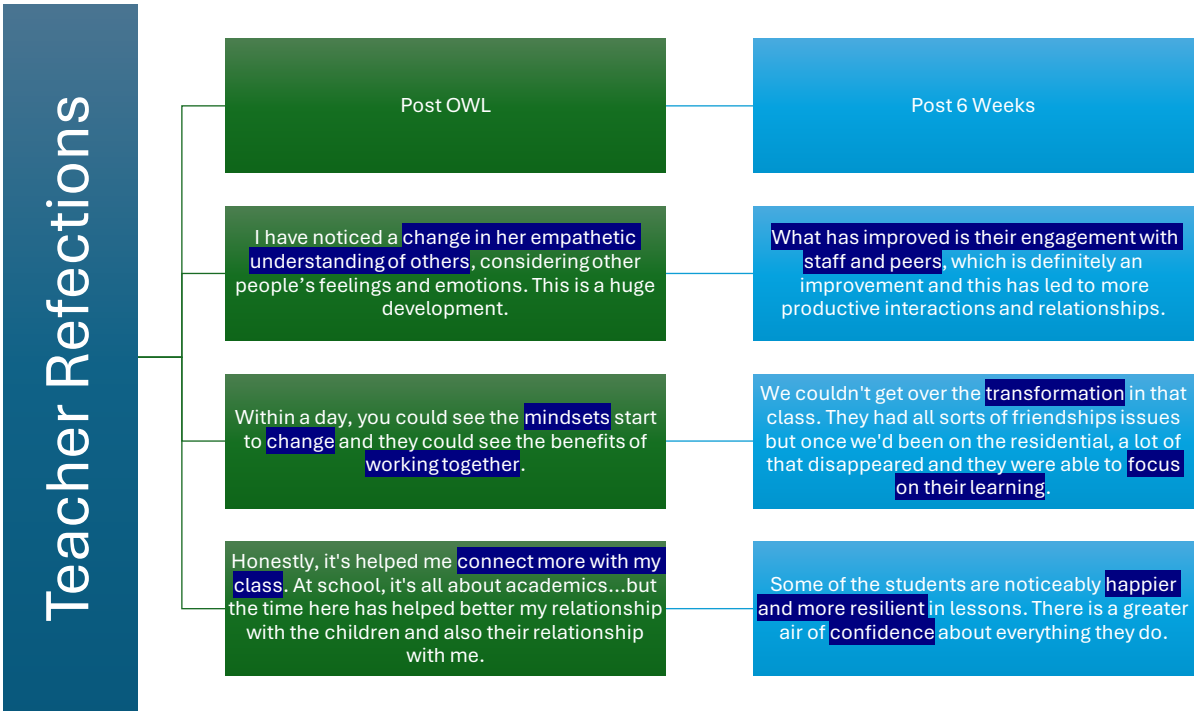


Fig.28: Teacher testimony reflecting the theme of Social Connection

Wellbeing: Discussion

The OWL intervention sees a **modest shift in self-reported wellbeing from just below to just above the national average (see Figure 20)**. This statistically significant pre-to-post shift (Wilcoxon signed-ranks test, $p<0.0001$) aligns with findings from the Teacher Survey, where a 19% increase was observed in teachers reporting that "most or all" of their pupils were "generally feeling optimistic" (see Fig. 7). These results highlight **the immediate benefits of the intervention on pupils' overall sense of wellbeing.**

Resilience emerged as a particularly strong outcome of the OWL experience. The statement relating to **resilience** "I've been dealing with problems well", saw the largest pre-to-post percentage increase (8.5%) of all wellbeing statements, with high statistical significance (Wilcoxon signed-ranks test, $n=833$, $p<0.0001$). Similarly, the custom statement *"I tend to bounce back quickly after hard times"* revealed a significant positive shift (see Figure 21). Teacher-reported outcomes further reinforce this finding, with a 38% increase in teachers who felt that "most or all" of their pupils were "able to deal with difficulties without too much stress" (see Figure 7).

Qualitative data also supports these findings, with endurance and perseverance emerging as key themes in pupil reflections. This aligns with the broader evidence base linking nature connectedness to personal growth and resilience. For example, Pritchard et al. (2020) found that self-reported personal growth is strongly related to nature connectedness, suggesting that the OWL's immersive outdoor experiences help pupils develop coping skills and a stronger sense of self.

Wellbeing and nature connectedness

The relationship between wellbeing and nature connectedness was examined using Pearson's coefficient, which revealed a moderate positive correlation (0.37) with the INS and a strong positive correlation (0.53) with the modified NCI. These findings suggest that higher levels of nature connectedness among participants are associated with better self-reported wellbeing outcomes.

This result is consistent with the strong evidence base demonstrating the link between nature connectedness and wellbeing (Capaldi et al., 2014; Pritchard et al., 2020; Martin et al., 2020). The alignment between these quantitative findings and qualitative insights further reinforces the importance of fostering nature connectedness as a pathway to improved wellbeing. Pupils often reflected on moments of calm, joy, and connection during their OWL experiences, suggesting that both hedonic and eudaimonic dimensions of wellbeing were positively influenced.

Social connection

Social connection emerged as a dominant theme, with pupils reporting an increase in social confidence and stronger relationships by the end of their OWL week. This outcome was mirrored in teacher observations at the six-week post-visit stage, suggesting that the intervention's impact on social dynamics was both immediate and sustained.

Mechanisms for change

Qualitative data from pupils and teachers indicate that the key mechanisms driving these wellbeing improvements include:

- **Time away from screens**, which allows pupils to disconnect from technology and engage fully with the natural environment.
- **Teamwork and collaboration**, which enhance social confidence and connection.

- **Ownership of tasks**, such as animal husbandry and conservation activities, which foster a sense of responsibility, purpose, and resilience.

These mechanisms support both *hedonic* wellbeing (feelings of peace and joy) and *eudaimonic* wellbeing (personal growth and purpose), as illustrated by the recurrent themes of “peace”, “joy”, and “personal growth” in pupil feedback.

Conclusion

In conclusion, the OWL residentials have demonstrated a significant and meaningful impact on pupil wellbeing, with notable improvements in resilience and social connection. The statistically significant gains in self-reported wellbeing, coupled with a strong positive correlation between nature connectedness and wellbeing, highlight the transformative potential of immersive nature experiences in educational settings.
While these findings are very encouraging, the more modest overall gains underscore the importance of follow-up activities that reinforce resilience and personal growth. Some outlier findings on screen-free time also suggest a need to consider the balance between the benefits of disconnection with the challenges faced by some pupils.

5.1.4 Engagement in Learning

Key Findings

- **Self-reported vs teacher-reported outcomes**: While no significant differences were observed in self-reported pupil data for engagement in learning (see Figure 29), at six weeks post-intervention, **78% of teachers** reported that most or all of their pupils were **engaged in learning**, representing a **38% increase from pre-OWL levels** (Figure 7).
- **Growth mindset:** Qualitative data strongly suggests that an OWL fosters a **shift in pupils' learning mindset**. Themes such as challenge, perseverance, and a sense of possibility frequently emerge, indicating that the experience helps pupils build **resilience** and develop a greater capacity to embrace a **growth mindset towards learning.**
- **Mechanisms for change**: Opportunities for **independent work**, **repeated attempts to succeed**, and **structured reflection time** were frequently cited by teachers as critical factors in enhancing learning engagement and resilience**.**
- **Sustainability:** At six weeks post-OWL, some teachers observed that improvements in learning behaviours had translated into **meaningful classroom changes**, including **increased independence and cooperation**. However, others reported no sustained change, highlighting **variability in outcomes.**

"The children have a better sense of themselves and what they can do, some have come back more resilient, others will try things they wouldn't have tried before." OWL Teacher

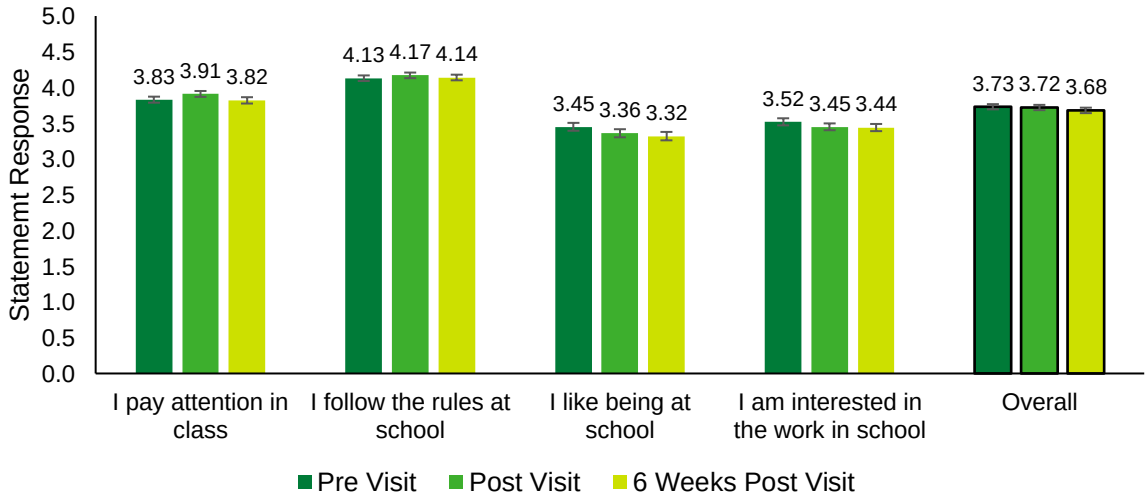


Fig.29: Responses of OWL participants to the custom statements related to Engagement in Learning by question and the combined score. No significant difference was found between pre and post visit scores using Wilcoxon signed-rank test (n=588, p=0.08).

Grit and Growth Mindset

An emerging theme from the pupil and teacher qualitative dataset was the suggestion of a shift in learning mindset as a result of an OWL. Figure 30 illustrates how a combination of challenge, perseverance and a sense of possibility might have contributed to some pupils feeling more open and able to adopt a growth mindset towards learning. Teacher reflections at both the post OWL and post 6-week point support this theme with opportunities to work more independently and multiple chances to 'try again' cited as key mechanisms leading to increased learning engagement.

At the 6-week stage, some teachers reported that pupils' improved learning behaviours, such as increased independence and perseverance, had translated meaningfully into the classroom.

However, others observed no sustained change, with a minority noting that pupils continued to struggle with work ethic and engagement.

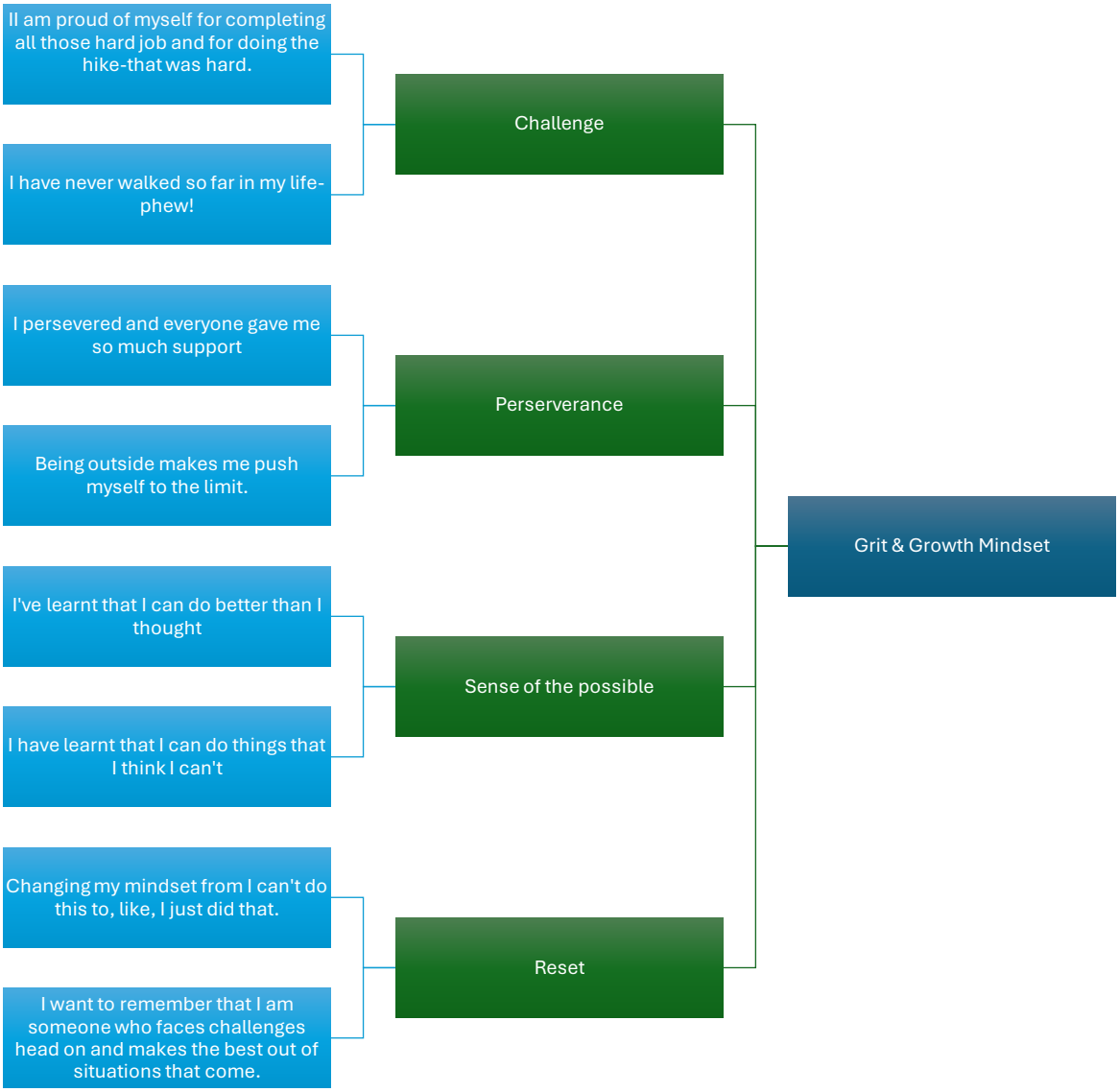


Fig.30: Pupil postcard & reflection data reflecting the theme of Growth Mindset

“I can take my wellies off with no help, persevere like a woman, try new things with no fear!”

KS2 OWL Pupil

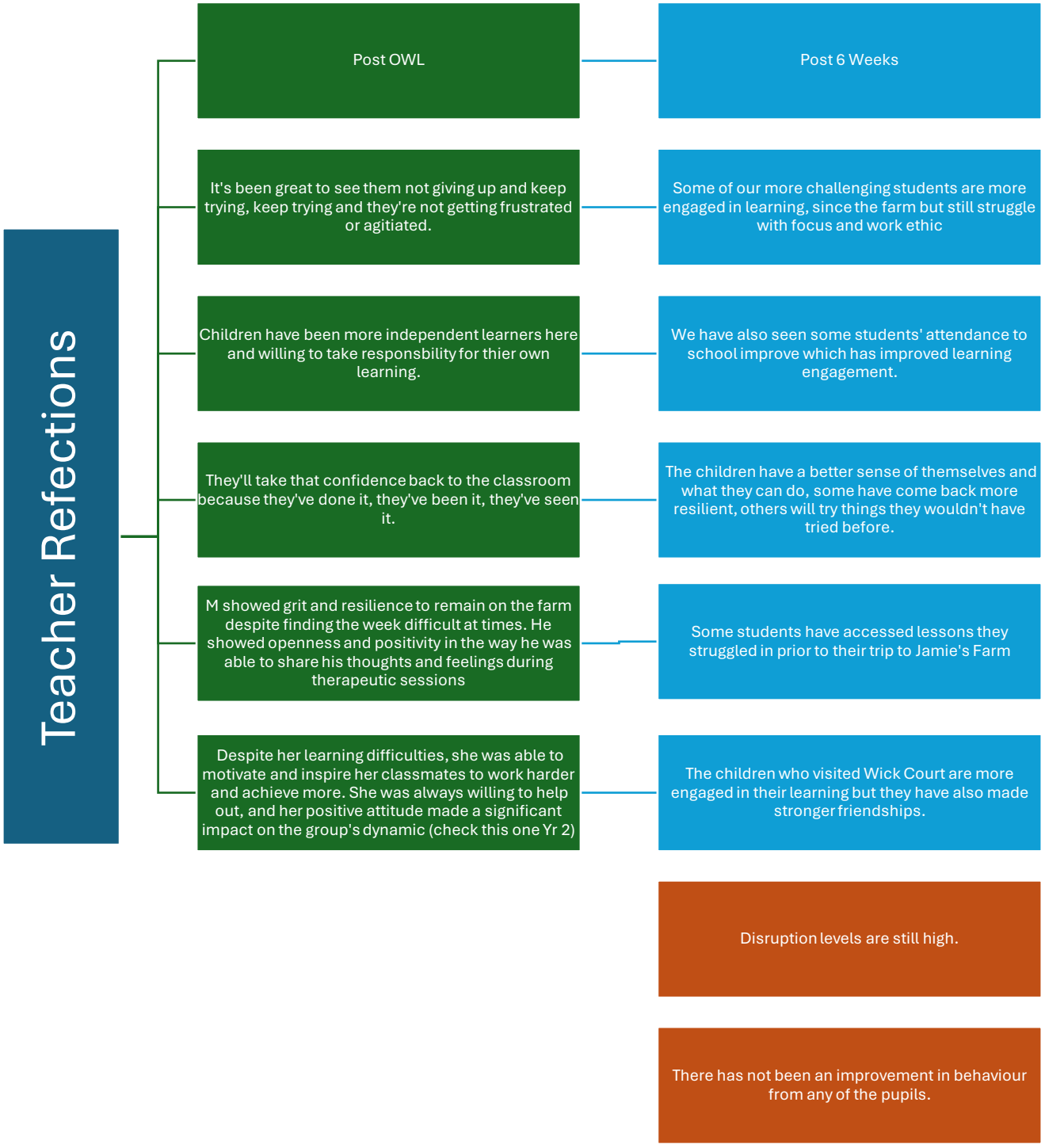


Fig.31: Teacher testimony on Engagement in Learning

Engagement in Learning: Discussion

The observed discrepancy between pupil-reported and teacher-reported outcomes is worthy of further consideration. Further teacher-reported gains included a **15% increase** in perceived pupil cooperation during lessons and a **21% increase** in positive interactions between pupils and their peers or teachers. These results suggest that the intervention's impact on engagement may not be fully captured through pupil self-reports, potentially highlighting the **limitations of current measurement tools.**

Qualitative findings add depth to these observations, suggesting that the OWL intervention promotes a **shift in learning mindset,** with themes of challenge, perseverance, and self-reflection frequently emerging in pupil and teacher feedback. Pupils reported increased resilience and confidence in learning, which teachers corroborated through their observations of pupils taking on challenges more independently and demonstrating a willingness to "try again" after setbacks.

At six weeks post-intervention, some teachers reported that these initial gains had translated into meaningful changes in the classroom, including greater learning independence and increased confidence. However, this was not universally observed. A subset of teachers noted no sustained improvements, with some pupils continuing to struggle with work ethic or showing limited engagement.

These **mixed findings** highlight the variability in how pupils respond to the intervention, which may depend on factors such as individual characteristics, classroom dynamics, or the level of follow-up support provided after the OWL experience. While the qualitative feedback is overwhelmingly positive, the absence of significant pupil-reported changes and the mixed sustainability of teacher-reported outcomes suggest that further investigation is needed to understand and optimise the mechanisms driving engagement in learning.

The discrepancy between pupil-reported and teacher-reported outcomes may reflect differences in how engagement is perceived and measured. Teachers' observations may capture behavioural shifts not fully articulated by pupils, while self-reported data could be affected by factors such as literacy or the immediate recall of experiences.

Conclusion

In conclusion, the OWL intervention demonstrates clear potential to enhance pupil engagement in learning, particularly through mechanisms such as challenge, perseverance, and self-reflection leading to more of a growth mindset. While teacher-reported outcomes highlight significant gains in classroom engagement and cooperation, the lack of significant self-reported changes underscores the need to revisit measurement tools. The variability in sustained outcomes further suggests that follow-up activities and tailored support may be essential to maximise the programme's impact.

5.2 School Outcomes

6 weeks after an OWL…

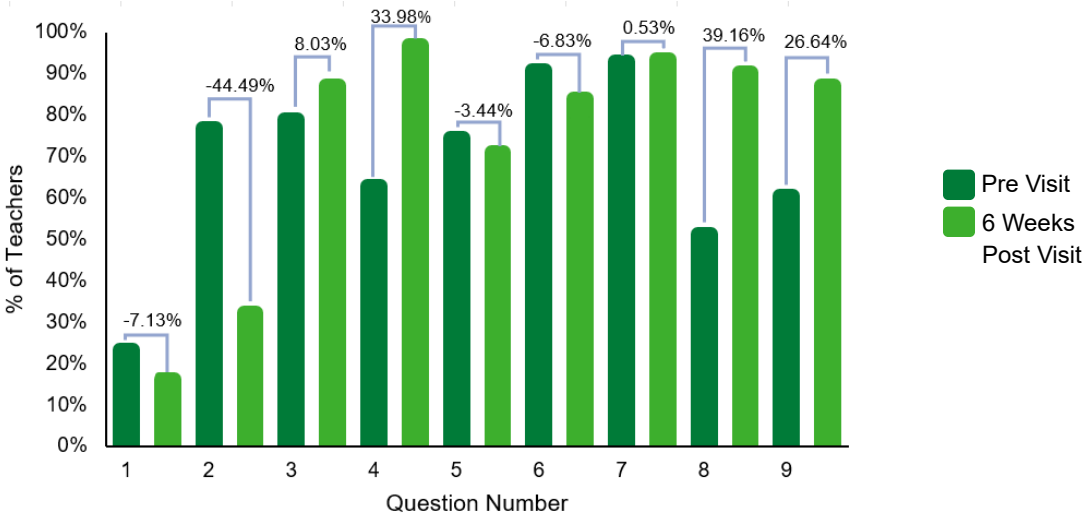
96% of teachers feel that spending time in nature is important to them **(↑ 34%)**

92% of teachers believe that Outdoor Learning is beneficial to both teachers and pupils **(↑ 39%)**

90% of teachers feel confident about taking their teaching outside the classroom **(↑27%)**

But only 32% of teachers believe they have access to the resources needed to deliver Outdoor Learning experiences **(↓ 45%)**

Teacher Confidence



1) I have access to the tools/equipment I need to deliver Outdoor Learning
2) I have access to the resources I need to deliver Outdoor Learning experiences
3) I enjoy delivering Outdoor Learning
4) Spending time in nature is important to me
5) I feel part of nature
6) I feel knowledgeable about the benefits of Outdoor Learning
7) I believe in the benefits of Outdoor Learning
8) I think Outdoor Learning is beneficial to both me and my pupils
9) I feel confident taking my teaching outside the classroom

Fig. 32: Teachers who selected agree or strongly agree when rating the teacher confidence statements (above). Pre Visit n=43, 6 Weeks Post Visit n=31

"My pupils were inspired to house chickens at our school and now we do!"

OWL Teacher

Outdoor Learning in Schools

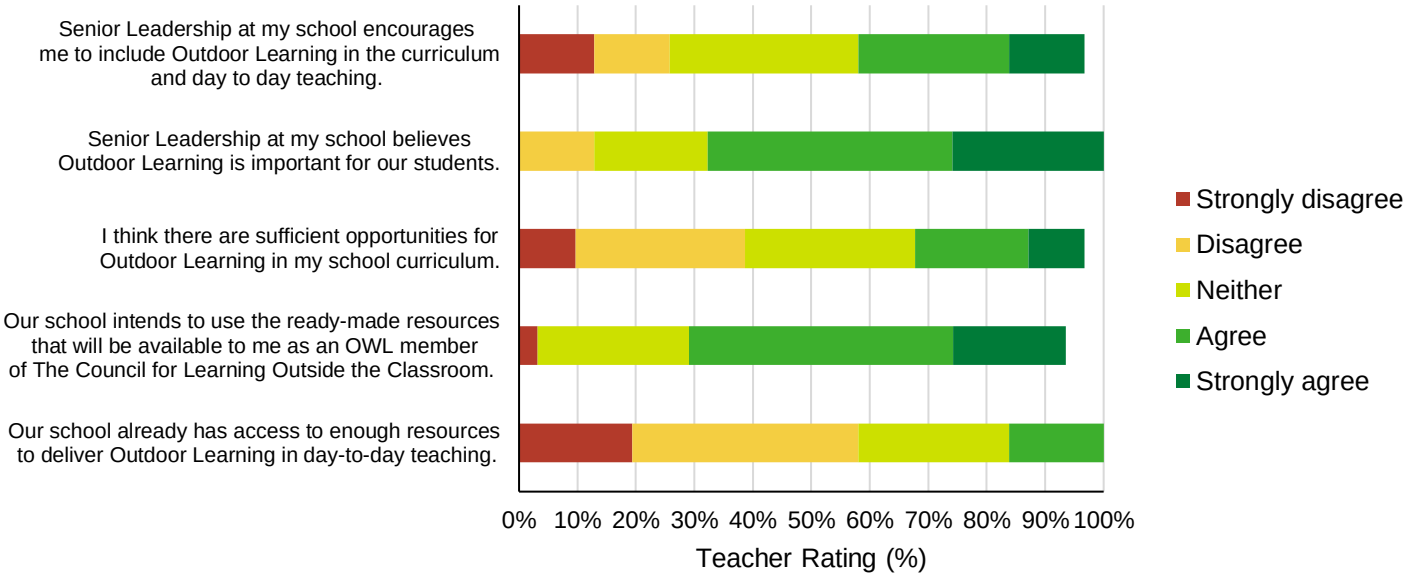


Fig.33: Teacher ratings to statements relating to Outdoor Learning in Schools, 6 weeks after the OWL intervention (n=31)

"Thank you so much and congratulations to everyone who has put it together. The resources look excellent!" **OWL Headteacher**

Supporting Schools: Transport, Resources, and Training Grants

This year, significant progress has been made in supporting schools to access and embed Outdoor Learning through targeted grants and resources. Key highlights include increased uptake of the teacher training grant, successful piloting of new tools such as *Residential in a Box*, and ongoing efforts to support resource provision and professional development.

Transport Grant

In Year 3, the transport grant enabled 32 schools to access funding of £37,100 to cover the costs of coach and minibus travel to OWL settings. As predicted, the level of funding requested from individual schools for this grant was up on last year though the number of schools remained at just over 50% of the whole cohort.

The steady uptake raises questions about persistent barriers to access, such as overall school capacity or communication challenges around the opportunity which it would be useful to follow up in future evaluations.

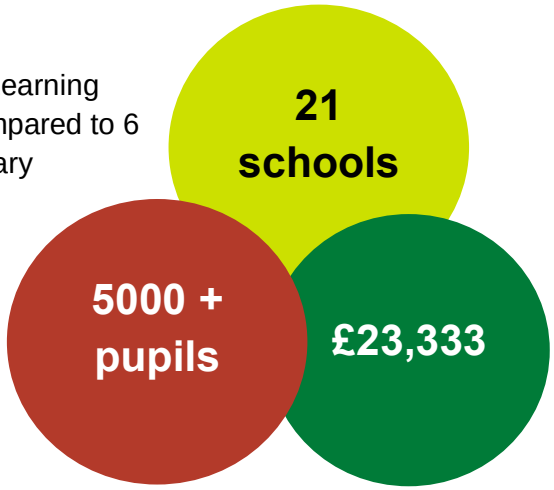
Residential in a Box Pilot

15 primary schools were sent Residential in a Box resources prior to their OWL to help pupils and families familiarise themselves with different elements of the visit. To date, there has been some initial positive feedback, including praise for the teaching resources and Flying Together, a resource to help parents and guardians prepare their children for what is often their first week away from home. Further evaluation is needed to assess the full impact of these resources and their potential for scaling.

Council for Learning Outside the Classroom

31 schools were provided with annual membership to The Council for Learning Outside the Classroom (CLOtC), providing teachers with free access to a range of curriculum-linked Outdoor Learning teaching resources and CPD opportunities. However, feedback on uptake remains slow, prompting closer monitoring in Year 4 to better understand barriers and promote engagement.

Teacher Training Grant



2023/24 saw a considerable increase in uptake of the Outdoor Learning teacher training grant with 21 schools in receipt of this grant compared to 6 in 2022/23. The most popular take up of the grant was for Primary Foundations Outdoors and Outdoor Learning Advisory visits delivered by Learning Through Landscapes. Participating schools have estimated that 5730 pupils will potentially benefit from additional Outdoor Learning as a result of these grants.

Some schools applied for grants to work with locally sourced providers and the flexibility the Trust was able to offer meant that some of the grants awarded this year helped schools to embed an Outdoor Learning culture in a variety of ways as depicted in the three case studies below:

A Garden Classroom in Hackney

Our schools are in very urban areas and many of our children do not have easy opportunities to access green space, nature and outdoor spaces so this is very important.

Following their OWLs at Ufton Court, a cluster of 4 schools in Hackney were awarded a teacher training grant to fund a School Leader's Sustainability Conference and 4 twilight workshops for 60 teachers in the Federation with The Garden Classroom.

The workshops provided by The Garden Classroom used the very limited green space on site and just across the road, to demonstrate to teachers the possibility of doorstep Outdoor Learning. The school have since reported that an estimated 1770 children (Reception to Year 6) have benefitted from the Outdoor Learning sessions that have resulted from the grant.

"An additional outcome from talking to the Ernest Cook Trust and meeting other partners at the conference was that one of our (OWL) schools accessed an additional £10,000 DFE grant as part of the National Education Nature Parks and have used it to increase the green space in their playground. They now have a wellbeing garden and outdoor classroom that is timetabled for daily use.

The Ernest Cook Trust have been really flexible and supportive - it is so nice to have direct contact with the team and discuss our plans and outcomes with them in person – I cannot speak highly enough of it all"

Sandra Gaudan, Learning Development Manager, Primary Advantage, Hackney

An OWL-inspired book for Barry

On receipt of an OWL Outdoor Learning training grant, 60 children and 8 teachers from the Pencoedtre Learning cluster in Barry, Wales worked with a local author to create and produce 'Muck & Magic.' The story is inspired by their OWL at Lower Treginnis with Farms for City Children and has helped them to reflect on everything they learnt during their week on the farm and apply it to their lives back at school.

"This project was hugely valuable as it allowed the children to link an experience away from school to their own contexts and lives. It has also helped accelerate their learning."

Hannah Cogbill, Year 6 Teacher, Pencoedtre Learning Cluster

"As a result of sharing the book with more than 1500 children across our schools, it has ignited a curiosity and love for outdoor learning.

The pupils are currently working on developing their own garden to grow their own food and cook for their families and community."

OWL Mentors & An Eco Team in Bristol

An Outdoor Week of Learning has become a popular part of the school calendar at City Academy, Bristol and in their 3rd year, the school decided to give some pupils the chance to develop their leadership skills and return to Shallowford Farm for the second time, as OWL mentors.

In addition, the school were supported with a Teacher Training Grant for an Award in Learning Beyond the Classroom. Pupils from the School Eco Team have created a wildlife pond, a hedgehog garden and are involved in tending the school's community allotment.

"We saw a big change. As the week progressed, the OWL mentors took on more responsibilities. We could step back and they were leading. We don't have the opportunity for them to do that here. The teachers also develop skills that they are not able to at school. Now, the whole staff body wants to go!"

Felicia Lazar, City Academy, Bristol

"It was great going back to Shallowford for the 2nd time and showing everyone around. I was a room monitor and also helped lead on cleaning out the pigs and some of the surveys we did…I've learnt that I can help explain new things to others…[and] that felt good!"

OWL Mentor, Year 9, City Academy

School Outcomes Discussion

Teacher Appreciation and Confidence

Figure 32 suggests that **teachers' participation in an OWL can significantly impact their belief and confidence in Outdoor Learning.** This is particularly pertinent to teachers' appreciation of nature (+ 34%), teachers view of Outdoor Learning as beneficial to their pupils (+ 39%) and in teachers' perceived confidence in taking their learning outside (+ 27%).

In post-OWL interviews, teachers were also keen to emphasise the wider impact that this type of residential has had on their experience with their pupils. Common descriptors included:

- **Independence**: The importance of the **residential element** in helping cohorts to develop critical **independence skills**
- **Purpose**: The work-focused, hands-on nature of OWL settings gave both teachers and pupils a **clear sense of purpose**, connecting learning to the real world.
- **Levelling the playing field:** The **common endeavour** of both teachers and pupils in learning something new in an unfamiliar setting helped to break down traditional hierarchies between teachers and pupils.
- **Strengthening relationships**: The opportunity for both pupils and teachers to **see each other in a different light fostering stronger, more positive relationships.**

However, despite these clear benefits, **resourcing Outdoor Learning is still a significant issue** with only 18% of teachers agreeing that their school has access to enough resources to deliver Outdoor Learning in day-to-day teaching in the post-6 week survey (Figure 32). Indeed, it appears that exposure to an **OWL compounds teachers' perception of a deficit of resourcing** with only 32% of teachers stating that they (as individuals) had access to the resources needed to deliver Outdoor Learning experiences at the post 6-week stage, a **fall on pre-visit results of 45%**.

This unexpected finding raises important questions about what "resources" mean to teachers—whether this includes physical tools, access to outdoor spaces, or professional time and support. It is possible that participation in an OWL provides teachers with a clearer understanding of what high-quality Outdoor Learning requires, thereby exposing previously unrecognised gaps. Future evaluations should explore this in greater depth to clarify whether these deficits are material, practical, or systemic, and to inform strategies for addressing them.

"Many of the families are displaced from all over the world-many wondering what their next move will be. They don't deserve second best, they deserve the best and this week has really shown these children the best of what can be offered."

OWL Teacher

School Commitment

The teacher survey presents a mixed picture around Senior Leadership Team (SLT) commitment to Outdoor Learning in OWL schools (Figure 33). Whilst 68% agree or strongly agree that SLT believe

in Outdoor Learning as important, only 42% state that they are encouraged to incorporate it into their day-to-day teaching. This discrepancy suggests that while leadership buy-in exists, it may not always translate into practical support or prioritisation within the curriculum.

However, there are promising signs of progress. The **significant increase in uptake of the teacher training** grant and corresponding case studies suggest that the programme is beginning to fulfil its ambition to help schools meaningfully embed an Outdoor Learning culture into their own settings. The case studies demonstrate that targeted support, combined with flexible funding opportunities, can empower schools to overcome barriers and develop sustainable Outdoor Learning practices. Moving forward, further monitoring of SLT support and practical resourcing will be important to ensure that these gains are consolidated and expanded.

Conclusion

The OWL Collaboration continues to demonstrate its ability to enhance teacher confidence, strengthen school commitment, and improve access to Outdoor Learning. However, persistent challenges around resource availability and SLT encouragement remain. While exposure to OWL experiences clearly builds teachers' awareness and enthusiasm, it also highlights gaps that must be addressed to ensure long-term sustainability. Future priorities could include:

- Exploring the nature of resource deficits more fully to identify practical solutions.
- Strengthening SLT engagement to convert belief into actionable support
- Building on the success of targeted grants to further embed Outdoor Learning practices in schools.

By better understanding these areas, the programme can continue to develop solutions which unlock and enable more meaningful, systemic change to ensure that Outdoor Learning becomes a core, sustainable part of school culture.

"It currently feels like a well-oiled machine of collaborators"

OLC Partner

5.3 Network Outcomes

Collaborating at The Countryside Education Trust, Hampshire, September 2023

Learning at Lambourne End, Essex, January 24

Key findings

- **Strengthening delivery and evaluation**: The Year 3 Network survey (Figure 34) highlights that partners value the collaboration for its shared purpose, added value, and flexibility, describing it as *"a well-oiled team of collaborators."*
- Many partners report that participation has strengthened their delivery models and evaluation approaches, enabling them to improve practice.
- **Diverse opportunities for collaboration**: The Trust facilitated a broad range of activities designed to meet partners strategic goals including learning days, partner visits, and profile-raising opportunities.
- **Overall positive outcomes, some challenges with relevance**: Despite overall positivity, one partner felt that the Network meetings were not always fully applicable to their context:
  "I love our in-person meetings, but I don't always feel this translates to our setting."

90%

of partners agreed or strongly agreed we are building a stronger community of practice

100%

of partners agreed or strongly agreed we are helping to raise the profile of the sector

90%

of partners agreed or strongly agreed that we are building a stronger evidence base with which to influence policy.

Network Activities

The Trust has continued to facilitate a range of opportunities to help the Network fulfil its strategic goals. The results of the Year 3 Network survey (see Figure 34) suggest that a shared endeavour, added value and flexibility have all served to create 'A well-oiled team of Collaborators.' Network partners also testify that The Collaboration had helped them strengthen both their own delivery offer and evaluation approaches (see Table 4).

The following tables illustrate the range and breadth of activities facilitated by The OWL Collaboration and highlight partner feedback, showcasing both the diversity of opportunities provided and the perceived value among network participants.

Table 3: The OWL Network Summary Year 3 Deliverables

Online Meetings	Whole Network Learning Days	Partner to Partner Visits & Training	Raising the Profile
• Growth Mindset • Year 2 Evaluation: Learnings & Sharing • OWL Legacy: Champions & Pledges • Re-visiting our Quantitative Metrics for Yr 4 • Yr 4 Onboarding with Wavehill	• Small Steps to Participatory Evaluation • Therapy on the Hoof Training • Foundations for Outdoor Learning • Storytelling Guidelines • Setting up a Youth Advisory Board	• Shared staff placements between partners • 2-way individual visits to learn about specific practice • The Art & Energy Collective 'Train the Trainer' Session	• Presentations and stalls at 5 public events • Sharing of OWL Strategic Story at NCN Webinar • NCN Research Poster Presentation • Presentation at School Leader's Sustainability Conference

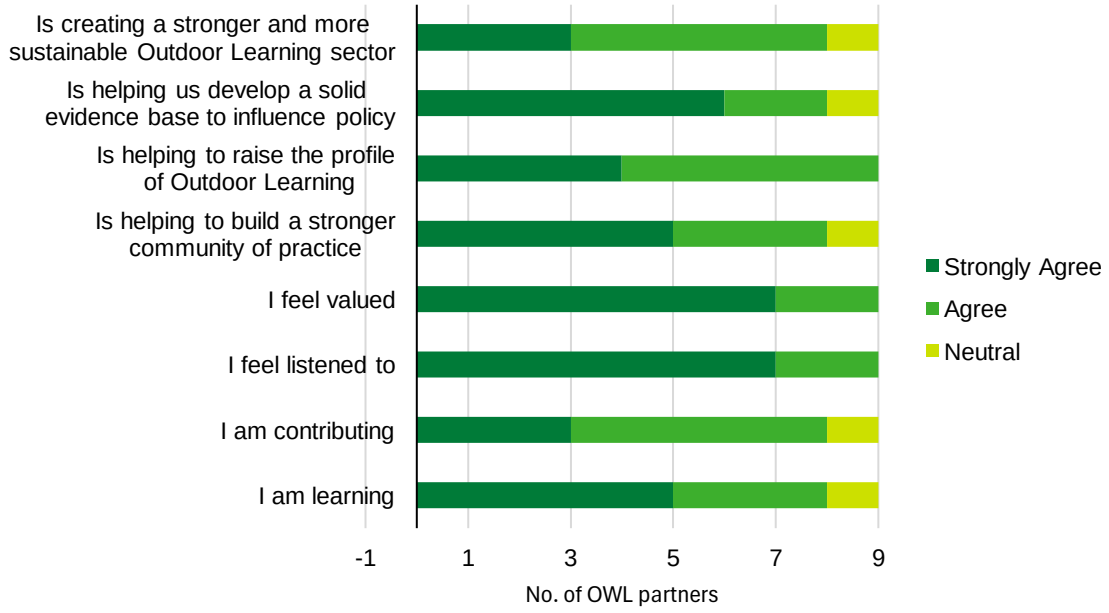


Fig 34: OWL Network Outcomes Survey Partner Responses (Strongly Agree to Strongly Disagree)

Table 4: OWL Network Outcomes Survey Partner Responses-Network Strengths

Network Strengths		
Common Endeavour	**Flexibility**	**Added Value**
This network is bringing success because it has brought together partners providing the same delivery model.	"On a day to day level, ECT have been extremely approachable, supportive and flexible."	OWL has helped us shape and strengthen our programme delivery through its provision and proactive, inclusive approach
I think we are a well established community with lots of shared interest and passion, it's great also to see the ECT team going from strength to strength.	The format of the meetings (both online and in person) provide all partners with an opportunity to share their thoughts knowing that they will be treated with serious consideration, with scope for differentiation between different OLCs where it is required.	Working as part of the collaboration has helped us to review and improve the ways we evaluate the impact of our work with all our groups -not just OWL groups
Creating stronger links between like-minded organisations	There has been direct impact from the adjustments to the provision available to us… as a result of the monitoring efforts.	For our Gloucestershire provision, the programme has strengthened county wide collaboration and beneficiary provision.

However, one partner explained that meetings can be problematic because of a lack of fit:

"I love our in-person network meetings, and feel I often learn a lot about the practice and experience of others, but don't always feel this translates to or is applicable to our setting. I also have quite a different role to others that take part in Network meetings, so don't always have as much to learn from others because of this." *OLC Partner*

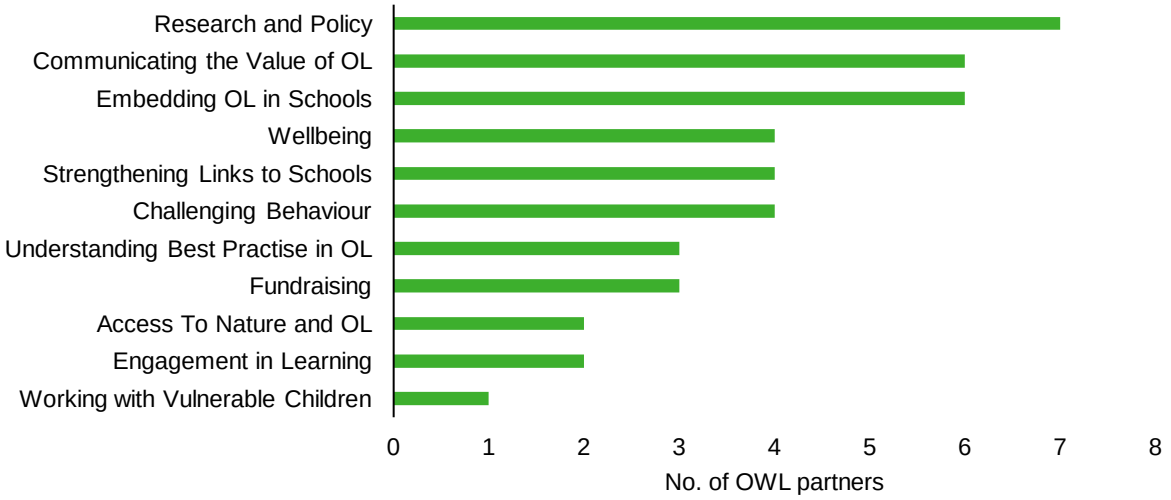


Fig 35: The OWL Collaboration Consultation Survey: Future Focus for the Network (October 24)

Figures 35 and Table 5 surmise the Network priorities for OLC partners for 2025. This gives the Trust a clear mandate to strengthen their legacy work, further dissemination opportunities and deepen The Collaboration's commitment to policy change. Qualitative feedback also emphasises the need to re-visit existing programme resources to ensure they are being maximised for the full benefit of pupils and programme.

Table 5: OLC Partner Comments-Network Future Focus		
Maximise Current Offer	**Deliver & Test pilot work**	**Policy Influence**
Ensuring existing resources and process are being used and working as well as possible.	Assess if there are any additional (but measurable) benefits to pupils taking part as a pupil from a NEST school.	I feel that at the time of a new government this is a key opportunity to influence policy and engage with MPs more proactively than we have in the past.

6 Conclusion

The findings in this report provide a clear evidence base to suggest that the programme continues to successfully meet its objectives in regard to reach, pupil, school and network outcomes.

Pupils

It is clear that both immediately following and at post-6 weeks, the programme particularly helps children and young people increase their **nature connectedness**, develop their **resilience** and improve their learning **mindsets**. Self-reported pupil data highlights particularly strong impacts on the **KS3 cohort**, suggesting that the programme is well-placed to address the developmental needs of adolescents. However, the variation in outcomes across cohorts should be considered within the context of differences in delivery settings and resource availability.

An OWL teaches pupils about the importance of environmental responsibility, food provenance and animal welfare, and provides critical time out in green spaces and away from devices. These aspects of the OWL contribute to positive changes in **pupils' behaviour**, helps **realign relationships between pupils and teachers**, and facilitates more constructive interactions, and friendships, between students. Teachers and pupils report that these mechanisms can translate into **improved classroom learning dynamics**, though current metrics for learning engagement offer mixed evidence.

Schools

The programme's commitment to **equity of access** has allowed pupils and schools to participate through funded transport costs, flexibility and familiarisation resources. The legacy element of the programme has also grown with an increased uptake in teacher training and **tangible outcomes** for **some schools** who have embraced an **Outdoor Learning culture**.

Despite this, **significant challenges** remain for many schools to successfully embed Outdoor Learning back in their own settings with some evidence of **a disconnect** between an apparent lack of **resourcing** and the resources offered by the programme.

Network

OWL partners testify to the programme's success in building a **community of practice** which has also helped some **extend their provision to local schools** and others to **strengthen their evaluation** processes. Many partners feel that the programme has helped **to amplify the collective voice** of the sector and influencing education policy is a key priority for Year 4 of the programme.

The recommendations below build on the successes, challenges and future opportunities posed by this evaluation and include both the rationale behind and suggested next steps for the future iteration of the programme. Some of these have already been actioned by the Trust.

Concurrently, we hope to build on the wider learnings that these findings pose through further research on and comparison against similar interventions in the sector.

7 Recommendations

7.1 Recommendations for Programme Reach

The programme has been successful in exceeding its pupil and school engagement targets for the third, consistent year. The programme has been able to engage schools with high levels of Free School Meals, Pupil Premium and SEND, many of which are located in areas of socioeconomic deprivation and those deprived of green space. In reaching double the number of pupils eligible for Free School Meals, those with SEND and those of minoritised ethnic heritage than the respective national averages, it has met its objective to reach underserved cohorts.

However, the drop in engagement of specialist provision warrants further enquiry. Additionally, further intelligence on school versus OLC locations would bring clarity to a future programme seeking to help schools develop longer term relationships with OLC partners.

> **R.1** Seek feedback from OLC partners to further understand the drop in programme engagement from specialist education provisions.
>
> **R.2** Consider conducting further enquiry into the ratio of schools accessing the programme from urban, rural and semi-rural locations and the distance travelled to OLCs. Greater understanding of the geographic distribution of participating schools (urban, rural, semi-rural) and their travel distances to Outdoor Learning Centres (OLCs) is needed to inform future programme planning.

7.2 Recommendations for Programme Intervention

Pupil Outcomes

At subgroup level, the greatest variations in pupil outcomes are between KS2 and KS3 cohorts. The findings show KS3 pupils start at significantly lower baselines and show considerably greater shifts across 3 of the 4 outcome pillars compared to KS2 pupils. Whilst there is likely strong causal links between these outcomes and the age itself, it is possible that the OLC setting and the type of intervention on offer is another causal factor.

Research highlights that nature connectedness declines in adolescence, often due to developmental factors (e.g., identity formation, peer influence) and social pressures (e.g., technology reliance, academic stress). This lower baseline, however, provides greater capacity for improvement, as KS3 pupils may find an OWL to be a novel and transformative experience. The programme's hands-on, collaborative, and challenge-based activities align well with their developmental needs, helping them reconnect with nature, build resilience, and develop teamwork skills.

> **R.3** Any future evaluation might more closely examine how the different OWL settings accommodate the varying needs of KS2 and KS3/4 cohorts. For example, are KS2 pupils benefitting from more play-based, exploratory activities that foster curiosity and engagement? Are older cohorts (KS3/4) experiencing an offer which better resonates with their stage of development such as involvement in leadership opportunities, problem-solving, and activities tied to real-world issues?

R.4 The evaluation suggests that an OWL can be instrumental in helping children and young people normalise conversations about nature. Future interventions might build more explicitly on this both during the OWL and as part of ongoing support to schools.

School Outcomes

School outcomes tell us that an OWL is highly valued by schools and has helped some teachers re-frame their pedagogical approaches. Teacher feedback is rich in enthusiasm for embedding the programme further into school life and the uptake in the teacher training grant in Year 3 is very encouraging.

However, surveys and interview responses tell us that meaningfully embedding Outdoor Learning in schools remains a challenge with only a minority of teachers (42%) believing they have SLT support to do this and even fewer (18%) believing they have access to the resources needed to deliver Outdoor Learning experiences.

In addition, initial feedback on the Residential In A Box (RIAB) resources has been positive but the potential use of and learning from this resource has yet to be fully tapped.

R.5 The Trust have already embarked on offering extended support to a selection of schools with the launch of the OWL Nest School pilot. In order to maximise the learning from this element of the programme, consider the introduction of an additional, longitudinal survey point and/or ancillary focus groups/ interviews for pupils and teachers of OWL NEST Schools.

R.6 In addition, build on the positive response towards RIAB and embed these resources more comprehensively into the OWL programme offer.

R.7 Consider developing the RIAB resources further to include appeal beyond the KS2 age-range.

Network Outcomes

Based on the feedback from the Year 3 Network Survey, the following recommendations are suggested:

R.8 Begin a consultation with OLC partners to initiate a strategic plan for the increased voice and influence of the programme.

R.9 Consider devising future meeting agendas to suit either Lead Practitioner or more strategic roles to ensure best fit for everyone attending.

7.3 Recommendations for Future Programme Evaluation

Teacher Data:

To improve both the quality and instance of quantitative teacher data:

> **R.10** Introduce further procedures which encourage the same teacher in each school to complete the full suite of surveys.
>
> **R.11** Introduce a teacher survey at the post visit stage to enable immediate capture of specific mechanisms of change for pupils.
>
> **R.12** Consider including additional interview questions or a focus group on teacher confidence and resourcing of OL at school.

Nature Connection Metrics:

The findings in this report confirm Year 1 and 2 programme results and the wider evidence base that this type of intervention leads to pupils feeling increased nature connectedness. Any future evaluation should seek to learn something additional about pupils' relationship with this pillar. Given the high markers of success for the programme in sustained statistically significant increases in the INS, alongside a higher-than-average baseline, it would be interesting to gain a deeper understanding of the reasons behind this outcome from the pupil perspective.

> **R.13** Include a qualitative statement asking why pupils have chosen their reported position on the visual INS scale.

Nature Disconnection Metrics

The findings from both Year 2 and 3 suggest a low instance of phobia-based disconnection amongst the OWL cohort with negligible outcomes. We still see merit in measuring aspects of disconnection and consultation with Dr Alexia Barrable to test and learn something new about attitudinal disconnection. Given the prevalence of comment in the qualitative data around habitual time indoors, particularly amongst the older cohort, following consultation with Dr Alexia Barrable, we suggest:

> **R.14** Replace the statement 'I find nature scary' with 'I prefer to spend time indoors rather than outdoors.'

Wellbeing Metrics:

Feedback from teachers and OLC staff suggests that the literacy level and cognitive maturity required to complete the SWEMHB has been challenging for younger cohorts. Yet, this remains an important scale which provides high levels of national comparison for the older pupils in the programme cohort.

> **R.15** Continue to use the SWMWBs for 13+ as a validated scale.
>
> **R.16** Explore use of more age-appropriate tools for the younger cohort such as the ONS-4, a single statement validated scale (validated at age 8+) for age 8-12.
>
> **R.17** Consult *The Wellbeing Measurement Framework for Primary Schools* by the Anna Freud National Centre for Children and Families.

Engagement in Learning Metrics:

The findings in this report replicate the considerable contrast between the quantitative and qualitative outcomes against this pillar in Year 2, bringing into question the statements against which we are measuring quantitative progress. It is evident that the current battery including statements such as 'I follow the rules at school' pertains to engagement with school as an institution, rather than scrutinizing engagement with learning.

It is therefore suggested that a future evaluation seeks to incorporate a scale which fosters greater understanding of the reported shifts in learning mindsets that have occurred as a result of programme intervention.

R.18 Adopt a scale with greater relevance to engagement in learning outcomes.

Data accuracy:

R.19 Consider introducing protocols which could facilitate coherence of experience when programme participants complete their post intervention surveys.

Data significance:

R.20 Consider possibility of statistical significance testing at subgroup level.

Control group design:

R.21 Consider the possibility of introducing a control group to a future evaluation.

Evaluation Scope:

The qualitative evaluation has generated suggested mechanisms of change with possible causal links to both inferred and observed outcomes as outlined in Table 6 below.

Table 6: Indicative Mechanisms for Change

Mechanism for Change	**Outcome (Inferred & Observed)**
Extensive time outdoors in nature	Feelings of peace, happiness and joy
Limited access to technology	Increased Social Connection
Routine	Behavior change
Repeated Tasks	Mastery and Learning confidence
Time for Reflection	Helps to generate a change in mindset

A future evaluation would benefit from a more extensive and inductive approach to qualitative enquiry which might include:

R.22 Adopting a more iterative mixed modal approach to evaluation which responds to the data as it emerges. This could include focus groups with specific pupil cohorts and teachers and would seek to further understand variations in outcomes between cohorts (for example age-ranges) and build on the both the inferred outcomes (post visit) and observed outcomes at post 6 weeks.

R.23 Building in greater understanding of the specific mechanisms of change which lead to pupil outcomes from both pupil and teacher perspective.

R.24 Using whole cohort and/or random sampling methods.

7.4 Recommendations for Wider Learning

One of the unexpected findings of this evaluation is that the OWL cohort overall and specifically pupils eligible for FSM started with a higher (INS) nature connectedness baseline than the mean national average. This is to an extent incongruent with Year 3 qualitative testimony and in great contrast to Year 1 & 2 findings. These findings may be influenced by several factors. These include potential selection bias, as schools already engaged in Outdoor Learning may be more likely to participate, and the cumulative impact of the programme, with returning schools fostering a more nature-connected internal culture. Broader societal changes, such as increased use of green spaces during the COVID-19 pandemic, and regional or demographic differences in the Year 3 cohort, could also contribute. Additionally, variations in survey delivery or interpretation and shifts in teacher awareness may have influenced responses. Further internal and external investigation is recommended to better understand these findings.

An additional unexpected finding was of the anecdotal benefit of the OWL to pupils of 1st generation migrant status who were able to link the experience of an immersive week in nature to life back in their homeland. This poses an interesting touchpoint for future enquiry.

The prevalence of a ceiling affect amongst the KS2 pupil cohort is suggested across 3 of the 4 outcome pillars and also warrants further investigation.

R.25 Conduct additional research into the ceiling affect to learn more about the possible ramifications for future evaluation.

R.26 Consider further enquiry into high level baselines of nature connectedness both across a future OWL cohort and in the wider population.

R.27 Consider further enquiry into the benefits of rural residential experiences for pupils of 1st generation migrant status.

R.28 Sub-group level enquiry has also revealed the need for more extensive research into the impact of Outdoor Learning on:

- SEND cohorts
- Children and young people in different Key Stages-particularly in a post pandemic climate
- Minoritised ethnic groups particularly at the level of individual sub-groups (much of the research focuses on BANE)

8 Thankyous

Collecting data over time takes time! We are indebted to the school staff who sought permissions, completed forms and patiently helped pupils to complete our surveys before completing one themselves. We thank all of those who also took the time to observe and reflect and who were willing to be interviewed.

Our enormous thanks to The Dulverton Trust for their ongoing support and commitment to The OWL Collaboration.

THE DULVERTON TRUST

Most importantly, we'd like to thank all the children and young people who participated in an Outdoor Week of Learning and who had the courage to tell us their stories.

We thank you all!

"If I could give it a number out of 10, it would be a 10! It was the best-it was such a break from school-it was such a break from home…thank you!"

KS3 OWL pupil

Appendices

Appendix 1

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Appendix 2

Surveys

Pupil Survey (completed online)

How are you feeling?

For each of the following statements, please select the answer that best describes how you've been over the last 2 weeks.

1. I've been feeling optimistic about the future.

2. I've been feeling useful.

3. I've been feeling relaxed.

4. I've been dealing with problems well.

5. I've been thinking clearly.

6. I've been feeling close to other people.

7. I've been able to make up my own mind about things.

8. I tend to bounce back quickly after hard times.

How are you feeling about school?

For each of the following statements, please select the answer that best describes your experience over the last 2 weeks.

9. I pay attention in school.

10. I follow the rules at school.

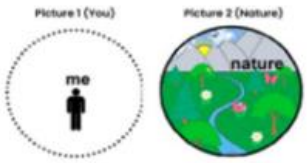
11. I like being at school.

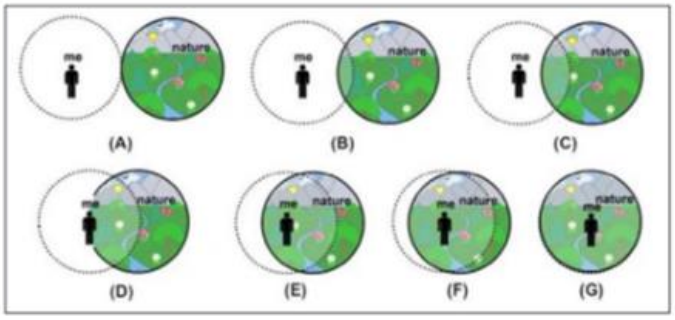
12. I am interested in the work in school.

What are your thoughts about nature?

We would like to ask you some questions about nature and environment. Nature means all types of natural environments and plants and animals living in them. Nature can be close to where you live in towns (in parks and gardens), the countryside or wilderness areas further away.

13. If Picture 1 is you and Picture 2 is nature, how much part of nature do you feel?





14. I know about nature and the environment.

15. I enjoy seeing animals and plants.

16. Being outdoors makes me happy.

17. Spending time in nature is important to me.

18. I feel part of nature.

19. I find nature scary.

20. I talk to my family and friends about nature and the environment.

21. I like to do things to help wildlife (e.g., feed birds, grow plants that insects like).

22. I enjoy taking care of animals and plants.

23. I treat nature with respect.

24. I can make the environment better.

25. I want to find out more about how food is grown.

Teacher Survey Questions (Completed online)

Survey 1 (Pre-visit)

Student Outcomes

1. My pupils are engaged in their learning at school
2. My pupils are cooperative in lessons
3. My pupils have positive interactions with their peers and teachers
4. My pupils are generally feeling optimistic
5. My pupils are able to deal with difficulties without too much stress
6. My pupils want to spend time outside
7. My pupils initiate conversation about nature/ outdoors with me or their friends
8. My pupils are concerned about the environment
9. My pupils show positive environmental behaviours (e.g., picking up litter)

Teacher Barometer

1.I have access to the tools/equipment I need to deliver Outdoor Learning experiences (e.g. wellies, ID sheets, art equipment etc)

2. I have access to the resources I need to deliver Outdoor Learning experiences (e.g., lesson plans, activities, inspiration)

3. I enjoy delivering Outdoor Learning

4. Spending time in nature is important to me

5. I feel part of nature

6. I feel knowledgeable about the benefits of Outdoor Learning

7. I believe in the benefits of Outdoor Learning

8. I think Outdoor Learning is beneficial to both me and my pupils

9. I feel confident taking my teaching outside the classroom

10. I feel confident communicating the benefits of Outdoor Learning to others

Survey 2 (Post-6 week)

Student Outcomes

1.My pupils are engaged in their learning at school

2.My pupils are cooperative in lessons

3.My pupils have positive interactions with their peers and teachers

4.Open response (about learning engagement) [If you would like to provide further

information, or there have been any changes related to students' learning or engagement, please provide details below. This can include particular examples and/or quotes]

5. My pupils are generally feeling optimistic

6. My pupils are able to deal with difficulties without too much stress

7.My pupils want to spend time outside

8.My pupils initiate conversation about nature/ outdoors with me or their friends

9.My pupils are concerned about the environment

10.My pupils show more positive environmental behaviours (e.g., picking up litter)

12. Open response (about nature connection) [If you would like to provide further information, or there have been any changes related to students' learning, please provide details below. This can include particular examples and/or quotes]

Teacher Barometer

1.I have access to the tools/equipment I need to deliver Outdoor Learning experiences (e.g. wellies, ID sheets, art equipment etc)

2. I have access to the resources I need to deliver Outdoor Learning experiences (e.g., lesson plans, activities, inspiration)

3. I enjoy delivering Outdoor Learning

4. Spending time in nature is important to me

5. I feel part of nature

6. I feel knowledgeable about the benefits of Outdoor Learning

7. I believe in the benefits of Outdoor Learning

8. I think Outdoor Learning is beneficial to both me and my pupils

9. I feel confident taking my teaching outside the classroom

10. I feel confident communicating the benefits of Outdoor Learning to others

School Survey (with text box inviting open response for each question)

1. Our school has applied for/or plans to apply for an Outdoor Learning Training Grant through The OWL Collaboration
2. Our school already has access to enough resources to deliver Outdoor Learning in day-to-day teaching
3. Our school intends to use the ready-made resources that will be available to me as an OWL member of The Council for Learning Outside the Classroom
4. I think there are sufficient opportunities for Outdoor Learning in my school curriculum
5. Senior Leadership at my school believes Outdoor Learning is important for our students
6. Senior Leadership at my school encourages me to include Outdoor Learning in the curriculum and day to day teaching

Network Survey

1. To what extent do you agree or disagree with these statements about your role in The OWL Collaboration Network *

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I am learning	○	○	○	○	○
I am contributing	○	○	○	○	○
I feel listened to	○	○	○	○	○
I feel valued	○	○	○	○	○

2. Please expand on your answer to any of the above statements. Please comment on why you have agreed or disagreed. If you have disagreed with any statements, please let us know how you think this might be improved.

Enter your answer

3. When do you think The OWL Collaboration Network has been at its best? *

Enter your answer

4. To what extent do you agree or disagree with these statements about the impact of The OWL Collaboration Network so far? The OWL Collaboration... *

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Is helping to build a stronger community of practice	○	○	○	○	○
Is helping to raise the profile of Outdoor Learning	○	○	○	○	○
Is helping us develop a solid evidence base to influence policy	○	○	○	○	○
Is creating a stronger and more sustainable Outdoor Learning sector	○	○	○	○	○

5. Has The OWL Collaboration Network helped your organisation in specific ways? If so, please tell us how below.

Enter your answer

6. What do you think The OWL Collaboration Network should focus on in 2024/25? *

Enter your answer

7. Please tick up to five areas where you would like more focus, discussion or information in 2024/25 *

Please select at most 5 options.

- [ ] Research & Policy
- [ ] Strengthening links to schools
- [ ] Embedding Outdoor Learning in schools
- [ ] Understanding best practice in Outdoor Learning
- [ ] Access to Nature & Outdoor Learning
- [ ] Communicating the value of Outdoor Learning
- [ ] Nature Connection
- [ ] Wellbeing
- [ ] Working with vulnerable children
- [ ] Challenging behaviour
- [ ] Engagement in Learning
- [ ] Fundraising
- [ ] Other

8. Do you have any other comments? *

Enter your answer

Appendix 3 Evaluation Framework

Outcomes	Quantitative measures	Qualitative measures
Pupils		
Nature connection ▶ Stronger connection to nature ▶ Improved understanding of nature	**Custom Inclusion of Nature in Self Scale (INS;** (Schultz, 2002).[8] This single-item graphical scale is used to measure the extent to which an individual includes nature within his or her cognitive representation of self. This custom scale contains a series of seven overlapping circles labelled self and nature with scores range from 1 to 7. The least overlapping circle receive a score of 1 and the most overlapping circle receive a score of 7. The custom version used in this evaluation uses a scale of 6 overlapping circles. **Custom survey based on the Nature Connection Index (NCI)[9]** The custom survey in this evaluation uses 6 questions inspired from the NCI which is a short, simple measure for nature connectedness for both children and adults. **Custom survey statement to measure Nature Disconnection** This is a relatively new construct and has been found to be correlated with lower levels of life satisfaction and pro-environmental behaviours[10].	**Storytelling:** OLC partners use three storytelling tools which were developed collaboratively.[11] **These are:** **Written Observations** by OLC staff and/or teachers on individual pupils and the four pillars- nature connection, care and concern for the environment, wellbeing, and engagement with learning. **Reflective activity** led by OLC staff with individuals or groups in different formats including 1-2-1 check-ins, focus groups and campfire reflections. Prompts comprised: experiences, key moments, significance and change.

[8] Schultz, P. W. (2002). Inclusion with Nature: The Psychology Of Human-Nature Relations. In P. Schmuck & W. P. Schultz (Eds.), Psychology of Sustainable Development (pp. 61–78). Springer US. https://doi.org/10.1007/978-1-4615-0995-0_4

[9] Richardson, M., Hunt, A., Hinds, J., Bragg, R., Fido, D., Petronzi, D. Barbett, L., Clitherow, T. and White, M. (2019). A Measure of Nature Connectedness for Children and Adults: Validation, Performance, and Insights. Sustainability. 11(12), 3250; https://doi.org/10.3390/su11123250

[10] Barrable A, Booth D. Disconnected: What Can We Learn from Individuals with Very Low Nature Connection? Int J Environ Res Public Health. 2022 Jun 30;19(13):8021. doi: 10.3390/ijerph19138021. PMID: 35805683; PMCID: PMC9266168.

[11] Developed in collaboration with OLC partners in July 2022 in partnership with Dr Lewis Winks at Lestari Education.

Care and concern for the environment ► Increased care and concern for the environment ► Increased positive interactions with nature ► Increased time spent in nature/ Improved desire to spend time in nature.	**Custom survey** developed by The Trust contains 5 statements that describe behaviours showing care and concern for the environment.	**Postcards** written by pupils about the memories they want to capture from their visit and reflections about being outdoors, something positive they've learnt about themselves and a pro-environmental behaviour they might try when they get back to school.
Wellbeing ► Improved pupil resilience ► Improved mental health and wellbeing	**Short Warwick-Edinburgh Mental Wellbeing Survey (SWEMWBS)**. This validated survey instrument is used by many different organisations, including a number of national governments, to gauge the mental wellbeing of a population. The SWEMWBS asks participants to describe how they are feeling in respect to 7 different statements. **Custom resilience statement adapted from the GRIT scale**	
Engagement with learning ► Improved engagement with learning (peers and teachers). ► Better engagement with school	**School Engagement Scale** This measure of school engagement assesses the three key areas of school engagement: behavioural, emotional, and cognitive[12]. Four items from this scale have been selected that relate to behavioural and emotional engagement. Higher levels of school engagement are associated with greater resilience and academic performance.[13]	

[12] Fredericks, J. A., Blumenfeld, P., Friedel, J., & Paris, A. "School engagement. In K.A. Moore & L. Lippman (Eds.) What do children need to flourish?: Conceptualizing and measuring indicators of positive development." New York, NY: Springer Science and Business Media. (2005).
[13] Glanville, Jennifer L., and Tina Wildhagen. "The measurement of school engagement: Assessing dimensionality and measurement invariance across race and ethnicity." Educational and Psychological Measurement 67, no. 6 (2007): 1019-1041.

Schools		
► Improved confidence and skills to support outdoor teaching and learning ► Improved buy- in from SLT members ► Increased integration of Residentials into the school curriculum ► Increased opportunities for Outdoor Learning embedded within the curriculum	**Custom teacher survey including the Teacher Barometer (developed by the Trust)** This survey measures: ► Opinions on nature and Outdoor Learning ► Implementation of Outdoor Learning ► Buy-in and support available in schools for Outdoor Learning ► Integration of Outdoor Learning in the school curriculum ► OWL's impact on pupil outcomes	**Interviews with teachers covering:** ► The residential experience ► Observed changes in pupils ► Effects of incorporating Outdoor learning on pupils ► The appetite for and practice of Outdoor Learning in school
Network		
► Optimised Outdoor Learning Centre residentials ► Improved evidence base for OWL ► Improved practice for evaluating impact with potential to influence policy and practice ► Improved programme quality through an impact driven approach ► Increased collaboration between OLCs through developing and supporting a Community of Practice	**A custom survey for OLC leads** developed by the Trust which measures OLCs' learning, collaboration, and collective effort to influence policy.	**Focus group discussion with OLCs covering:** ► Examples of changes made to their OWL offer as a result of feedback and its impact ► Examples of collaboration among OLCs ► Ways to improve the quality of the OWL offer

Appendix 4

Full Pupil Demographics Sample

Demographic/ other characteristics	Pupil demographic/ other subgroup	Number
Gender	Female	518
	Male	533
	Unknown	1
SEND	SEND	332
	Non-SEND	712
	Unknown	8
FSM	FSM	569
	Non-FSM	470
	Unknown	13
PP	PP	465
	Non-PP	583
	Unknown	4
EAL	EAL	246
	Non-EAL	806
	Unknown	0
LAC	LAC	24
	Non-LAC	1028
	Unknown	0
Key Stage	KS1	0
	KS2	792
	KS3	201
	KS4	57
	KS5	2
Ethnicity	White British	456
	White Other	70
	Black/Mixed Black+White/ Black+any other ethnicity	174
	Asian/Mixed Asian+White	86
	Other	54
	Unspecified/unknown	212
Visit type	2-day	83
	3-day	60
	4-day	45
	5 day	864

Appendix 5 Recorded Teacher Interviews

Primary Schools		**Region**	**Outdoor Learning Partner**
1.	Bannerman Road Community Academy	South West England	Shallowford Farm
2.	Bannister Primary	South East England	The Countryside Education Trust
3.	Bevois Town Primary School	South East England	The Countryside Education Trust
4.	Broadmead Primary School	London and Greater London	Bore Place
5.	Cadoxton Community Primary	Wales	Farms for City Children
6.	Churchend Primary Academy	South East England	Ufton Court Educational Trust
7.	Cobholm Primary Academy	East England	Ringsfield Hall
8.	Federation of Blenheim Road Community	Wales	Farms for City Children
9.	Hannah More Primary School	South West England	Shallowford Farm
	Holy Trinity Church of England Primary School	London and Greater London	Ufton Court Educational Trust
10.	Holton Primary School	Wales	Farms for City Children
11.	Jenner Park Primary School	Wales	Farms for City Children
12.	Oakfield Primary School	Wales	Farms for City Children
13.	St James Church of England Junior School	South West England	Farms for City Children
14.	The Bromley-Pensnett Primary School	West Midlands	Magdalen Farm
15.	William Davis Primary School	London and Greater London	Magdalen Farm
Secondary Schools		**Region**	**Outdoor Learning Partner**
16.	Accrington Academy	North West England	Jamie's Farm
17.	Brentside High School	London and Greater London	Jamie's Farm
18.	Cheltenham Bournside School and Sixth Form Centre	South West England	Jamie's Farm
19.	City Academy Bristol	South West England	Shallowford Farm
20.	North Birmingham Academy	West Midlands	Jamie's Farm
21.	Shenley Academy	West Midlands	Jamie's Farm
22.	The Archbishop Lanfranc Academy	London and Greater London	Jamie's Farm
23.	The Valley Leadership Academy	North West England	Jamie's Farm

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Contact The Ernest Cook Trust via email: owlcollaboration@ernestcooktrust.org.uk

www.ernestcooktrust.org.uk

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