

Making Space for Nature

Project Reports December 2022



Making Space for Nature

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This academic and enterprise partnership centred around the aim of working with local communities to co-produce plans for making space for nature. We present three reports that describe a series of community activities to this end. Appendix 11 describes how the infrastructure provided by the Accelerate programme supported Urban Habitats to improve its products, services, and capabilities, particularly in the areas of co-design and child health.

Phase 1 Let's Talk about Nature

Phase 2 Making Space for Nature

Phase 3 Actions for Nature

The Accelerate Programme

This project was sponsored by the Accelerate programme, a healthcare innovation programme aligned with Welsh Government's Well-being of Future Generations Act (Wales) 2015 and A Healthier Wales Plan for Health and Social Care. Accelerate is funded by Welsh Government's European Regional Development Fund (ERDF) and delivered by the Life Science Hub Wales in partnership with Cardiff University, Swansea University and The University of Wales Trinity Saint David. Accelerate enables collaboration between enterprises, healthcare professionals and academia to engage in innovative, evidence-based health and social care solutions.

Cardiff University's Clinical Innovation Accelerator (CIA) uses a flexible approach to develop and support Accelerate-sponsored projects such as The Outdoor Partnership's 'Opening Doors to the Outdoors' project, enabling agile innovation and collaborative working to achieve long-term improvements in health and well-being outcomes. The infrastructure provided by the Accelerate programme was designed to promote sustainable economic development for Wales, to achieve increases in employment and to establish sustainable enterprises creating evidence-based health and social care products, services and treatments, with potential for local, national and international impact.

Making Space for Nature

Phase I Report Let's Talk about Nature



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Summary of the Report

This report gives a brief overview of the project *Making Space for Nature* and summarises the preliminary findings of the first phase of the project. The core aim of our project was to work with the community surrounding Pentre Awel to co-produce plans for making space for nature in the existing community and in the future at Pentre Awel.

In the first phase of the project, *Let's Talk about Nature*, researchers from Cardiff University's School of Psychology asked primary school children at Ysgol Pen Rhos and their parents to explore Seaside Park, formally called Crown Park and adjacent to Ysgol Pen Rhos. Twenty-nine children aged 3 to 8 years and their parent or caregiver took part. Children and parents wore small recorders to allow researchers to listen to their conversations about local environments. These conversations provided naturalistic, open-ended evidence about how children and adults experience nature in their local community and their thoughts and feelings about how their community connects with nature. We also asked parents for information about how they spend leisure time and how connected they feel to their community and to nature. Their responses provide a picture of how families use local parks and how that use impacts on wellbeing.



ONE CHILD TAKING PART IN THE PROJECT MADE AN ARTWORK SHOWING NATURE'S TREASURES.

Collectively the methods addressing the first aim yielded both qualitative and quantitative evidence about the benefits of natural environments and about the barriers that will need to be addressed to increase those benefits for the Glanymor community. The conversations between children and parents as they explored Seaside Park provided naturalistic, open-ended evidence of the many ways that spending time in nature can stimulate children and support their healthy development. The conversations also revealed what children and adults value about nature. Children and parents identified ways in which the community can improve and protect nature as well as improving everyone's experience in their local park.

Introduction to the Project *Making Space for Nature*

Spending time in nature is positively linked to human health and wellbeing as well as environmentally responsible behaviour at all life stages (Dadvand et al., 2015; Hahn, 2021; Mackay & Schmitt, 2019; Mygind et al., 2021; Weeland et al., 2019). Importantly, however, disadvantaged communities are more likely to encounter barriers to engaging with nature, including lack of access, lack of confidence, and concerns about safety (Bates et al., 2018). To achieve policy objectives such as that of the UK Government 25-year Environment Plan to “encourage children to be close to nature, in and out of school” it is thus important to make space for nature in all communities.

Context of the project

Pentre Awel is a new development on an 83-acre site in south Wales along the Llanelli coast. Pentre Awel will include housing as well as business, education, research, and leisure facilities (Carmarthenshire Council, 2022). The aims of Pentre Awel are to improve employment and education as well as health and wellbeing amongst people living in south Wales; connecting people with nature is an essential component of this mission (Davies et al., 2019; Reynolds et al., 2018). In engagement workshops previously held at Ysgol Pen Rhos and Coedcae School, a nature trail was one of the top five recommendations children made for the future development at Pentre Awel.

Glanymor is an electoral ward immediately adjacent to the site of the Pentre Awel development. According to a report published by Carmarthenshire County Council in 2021, most households in Glanymor have a lower income than households in other wards in Carmarthenshire, and in addition adults have lower levels of educational qualifications and higher levels of unemployment. The report also states that the Welsh Index of Multiple Deprivation identifies Glanymor as one of the most deprived areas in Carmarthenshire and in Wales.

Ysgol Pen Rhos is a primary school situated in Glanymor that opened in April 2018 funded by the 21st century Schools Modernising Education Programme, a long term strategic plan for educational estates in Wales, collaboratively supported by Welsh Government, the Welsh Local Government Association (WLGA), and local authorities including the MEP team of Carmarthenshire County Council. Ysgol Pen Rhos has a Platinum award for Eco Schools and an Eco-Council that encourages members of the school community to consider the environment in all school activities and to share suggestions about how to make the school

more environmentally friendly. The school has a trained forest school teacher and all classes take part in regular outdoor learning. Ysgol Pen Rhos also participates in the Healthy Schools programme, which emphasises seven health topics: food and fitness, mental and emotional health and wellbeing, environment, personal development and relationships, substance use and misuse, safety, and hygiene.



YSGOL PEN RHOS HEAD TEACHER JOE CUDD ENTERING THE SCHOOL.

Project aims and strategies

The broad aim of our project *Making Space for Nature* was to work with people in the Glanymor ward to evaluate existing natural spaces in the community, including how people experience and use those spaces, and to co-produce plans for improving the quality and access to natural spaces in this area. Co-production refers to a set of principles about how public services are developed and delivered as well as the practices in which those principles are embedded. According to the Co-production Network for Wales, co-production is when people providing and receiving services work together to identify community needs and to develop solutions to those needs. Co-production involves building relationships and developing networks across people and groups that were not previously connected in order to enable people to change a situation.

Our co-production strategies centred around the children, families, and teachers at Ysgol Pen Rhos, a dual-stream primary school located in Glanymor ward. In August 2021 Cardiff University Professor Les Baillie began a project with Ysgol Pen Rhos that involves installing beehives on school grounds, training school staff as beekeepers, and several related educational opportunities for children. Head Teacher Joe Cudd and Assistant Head Teacher Isabelle Scott-James were enthusiastic about building on this existing partnership to give children at Ysgol Pen Rhos further opportunities. Our overarching plan was to work with increasingly broad groups of community members across the period of the project, starting with younger children and their parents (Phase 1), then an entire class (Phase 2), and finally families, neighbours, and other stakeholders (Phase 3).

Our co-production strategies also involved a wide-ranging team of experts. Professor Merideth Gattis from Cardiff University's School of Psychology led the project, including responsibility for Phase 1 as well as responsibility for planning and coordination across the whole project. Professor Gattis is a cognitive and developmental psychologist with expertise on how environments influence children and their parents. Dr Matluba Khan of Cardiff University's School of Geography and Planning led Phase 2. Dr Khan is a Lecturer in Urban Design with expertise in participatory design and planning, intervention research and evaluation of design for children's learning, health, and well-being. Urban Habitats, a built environment consultancy led by CEO Mark Drane, contributed to Phase 2 activities and led Phase 3. Learning through Landscapes, a UK charity that works with schools to promote children's outdoor learning and play, delivered two teacher workshops as part of Phase 2 and contributed to the planning and delivery of other activities in Phases 2 and 3. Other project partners provided advice and feedback based on their experience with Ysgol Pen Rhos and other community projects, including Head Teacher Joe Cudd and Assistant Head Teacher Isabelle Scott-James, Cardiff University Professor Les Baillie, Dr William Beharrell representing Hywel Dda University Health Board, Janis Werrett representing Cynon Valley Organic Adventures, and Barbara Coles representing Carmarthenshire County Council.



AN ARTWORK AT YSGOL PEN RHOS ILLUSTRATES THE ETHOS OF THE SCHOOL AND OF THE PROJECT MAKING SPACE FOR NATURE.

Phase 1 Let's Talk about Nature

The aim of Phase 1 was to engage community members in conversations about local environments. To address that aim, we recorded open-ended conversations between 29 primary school children at Ysgol Pen Rhos and their parents during walks through Seaside Park (formally known as Crown Park) and in a classroom at the school. We framed the conversations as a treasure hunt, based on a previous project in which children and parents explored Bute Park and the Bute Park Education Centre (Cameron-Faulkner, Macdonald, Serratrice, Melville, & Gattis, 2017; Cameron-Faulkner, Melville, & Gattis, 2018). A researcher introduced themselves, asked parents to complete a consent form and a brief online questionnaire, and gave the parent and child small recording devices to attach to their clothing. The researcher said: "We'd like you to go on a treasure hunt (in the park / in this room, depending on where they were). We haven't hidden anything – we simply want you to explore. You can decide what is treasure. If you find something you like, that's a treasure. Sometimes you might find something that isn't a treasure, maybe because you don't like it, or because you think it doesn't look nice or doesn't make you feel nice. We might call that yucky treasure or rusty treasure. What do you want to call it?" The researcher gave children and parents a chance to ask questions, and then set a timer for 15 minutes. The researcher asked families to do the treasure hunt in both settings, with half of the families starting in the park, and half of the families starting in the school room. At the end of the session the researcher thanked the child and parent for taking part, told them that by doing so they were helping others see the environment through their eyes, and gave them a book as a gift.

In contrast to interviews and focus groups, conversations are more natural, spontaneous, and less susceptible to bias, in part because researchers are less directly involved. Although participants are still aware of taking part in research, the distance between participants and researchers – both physical and psychological – allows for a greater sense of privacy and autonomy. Researchers record and evaluate parent-child conversations to gain insights into how families experience and make meaning from everyday environments (Cameron-Faulkner, Macdonald, Serratrice, Melville, & Gattis, 2017; Zimmerman, Reeve, & Bell, 2010). Parent-child conversations can also reveal beliefs that people hold about the world around them, including the beliefs that adults share with children, which in turn influence children's developing world views and behaviour (Chalik & Rhodes, 2015; Marin & Bang, 2018).



IN PHASE 1 OF *MAKING SPACE FOR NATURE* RESEARCHERS ASKED FAMILIES TO GO ON A TREASURE HUNT IN THE PARK.

We also asked parents to complete a brief online survey about themselves and their child as well as their connection to community and nature. Children taking part were 3 to 8 years old and attended Ysgol Pen Rhos. Parents described their children as enjoying a wide range of outdoor activities, including football, dog walking, cycling, scootering, tag, playgrounds, splashing, parks, beaches, and woodlands. In indoors settings parents said their children liked to draw, colour, paint, build things, play with toys such as Lego and action figures, pretend play and putting on musical and dramatic shows, and play computer and video games.

Our preliminary analyses in Phase 1 focused on quantitative evidence about the importance of local parks and qualitative evaluation of conversations in Seaside Park to gain insights into what community members experience and value in local nature, as well as their concerns.

The Importance of Local Parks

Three families taking part in Phase 1 said their child had never been to Seaside Park before; most families said they visited Seaside Park at least once a month. Nearly all families said they visited some other local park at least once a month, and most families visited some other local park at least once a week. Families reported visiting parks more than one hour away less frequently: most families did so at most once a month and almost half of families did so at most twice a year. This information from families emphasises the importance of local parks: for this community, local parks are where children and families are most likely to spend time outdoors and visits to more distant nature spots are rare. Furthermore, families who reported spending more time in local parks also felt a stronger connection to community: spending time in distant parks was unrelated to feeling connected to community. It is worth noting that the overall frequency of park visits was low compared to current recommendations for children spending time outdoors: just 1 out of 4 families reported visiting parks with their child more than once a week.

Local parks are where children and families are most likely to spend time outdoors. Families who made more frequent visits to local parks also felt a stronger connection to community.

What is nature?

Children and parents taking part in Phase 1 talked about various aspects of nature that they saw, heard, or felt as they explored the park, including plants and animals as well as the general setting. The park setting stimulated rich language use by children and parents, including naming in both English and Welsh, describing, identifying colours, and counting objects together. The most frequently mentioned aspects of nature, or “treasures”, were feathers, flowers, leaves, trees, sticks, grass, berries, pinecones, and butterflies.

Parent: Can you see anything else, then? I've seen loads of feathers, and some leaves.

Child: What about a butterfly?

Parent: And we have seen them red berries, from the tree.

Child: What about a butterfly?

Parent: I know, I haven't seen any butterflies yet, have you?

Child: I saw one over there.



FAMILIES TAKING PART IN PHASE 1 OF *MAKING SPACE FOR NATURE* IDENTIFIED TREASURES IN THE PARK INCLUDING FEATHERS, FLOWERS, LEAVES, TREES, STICKS, GRASS, BERRIES, PINECONES, AND BUTTERFLIES.

Children and parents also talked about the feeling of being in the park.

Child: It's nice though, isn't it?

Parent: Say it again, mate.

Child: It's nice though, isn't it?

Parent: What's nice?

Child: Just this in general.

Child: How beautiful



CHILDREN AND PARENTS TAKING PART IN PHASE 1 OF *MAKING SPACE FOR NATURE* COMMENTED ON THE BEAUTY OF SEASIDE PARK AND THE PEACEFUL FEELINGS THEY EXPERIENCED THERE.

Families talked about some aspects of the park as treasures they could gather and give to loved ones, especially flowers, leaves, and feathers. Families talked about the path that goes around Seaside Park as an aspect of nature, including the views that can be enjoyed from various parts of the path, and the beauty of those views. One parent said that the park is “One great big treasure pot”, suggesting an appreciation for the park space as well as the natural elements it contains, and the potential of the space for the community. Children and parents also valued the park space for other qualities that are not specific to nature, such as the opportunities for leisure and sport, the space to run, to walk a dog, and to sit on a bench.

Nature as a space for curiosity and learning

Children and parents enjoyed discovering nature in the park together. Their conversations were playful and light-hearted.

Parent: What treasure do you want to find?
Child: Feathers.
Parent: Oh, look at that, wow. That's cute.
Child: Yeah and another feather.
Parent: And a tiny one.
Child: Yeah.

Children and parents made comparisons between different aspects of the park, including between different plants and animals and between the feeling of different objects, such as feathers, real grass versus astroturf or one stick versus another.

Child: Oh, look, tiny little flether - feather. Oh look, if you put it to the sun, it's kind of like a bluey.
Parent: Yeah, feel it.
Child: Yeah, it's nice.

Children moved beyond mere observation by asking many questions about their surroundings. They asked about the origins of names, as well as where particular animals or plants come from. For children, nature is a space for curiosity. Their questions included: “Wonder why they call them butterflies?” “What are these leaves called?” “Why there's so much worms?” “Why is there loads of holes in the grass?” “How do you get the seeds?” and “Why is that cloud colliding with that cloud?”

For children, nature is a space for curiosity.

Wonder why they call them butterflies?

Why is that cloud colliding with that cloud?

Nature as a space for teaching

Parents encouraged their child to find more specific names for objects.

Parent: You know that bird flying up there.

Child: Yeah.

Parent: That's called a magpie, because he's black and white.

Parent: Ooh, what's that?

Child: A feather.

Parent: A feather. Where do you think that's come from then?

Child: A bird.

Parent: A bird.

Child: Yeah.

Parent: What type of bird?

Child: A...

Parent: I think it might be from a seagull or something. Do you?

Child: Yeah.

Parent: Oh, look, look. What are these?

Child: What?

Parent: What are these?

Child: Flowers.

Parent: Do you know what flower it is?

Child: Daisy.

Parent: Yeah, it is a daisy. They're pretty, ain't they?

Child: Yeah.

Parents encouraged children to observe nature carefully, sometimes by pointing out sights and sounds, and other times prompting more detailed language to describe an object.

Parent: See what you can find on the way.

Child: A feather.

Parent: You found a feather; what colour's your feather?

Child: Um, black and white.

Parent: It is, well done.

Parent: Can you hear that?

Child: Yeah.

Parent: What noise is that making?

Child: I don't know.

Parent: It's making like a crunchy noise, isn't it?

Child: Yeah.

Parent: Crunchy.

Parent: Oh, can you hear that noise?
Child: Yeah.
Parent: Grasshopper.
Child: Grasshopper.
Parent: Can you hear that?
Child: Yeah.
Parent: Going bzz, bzz, bzz, bzz, bzz, bzz. Can you hear them?
Child: Where?
Parent: Hear that?
Child: Yeah.
Parent: It's a grasshopper.

Parent: Oh, look at this feather. It's got patterns in it.
Child: Yeah, he does.
Parent: Looks like tiger stripes. Oh, shall we keep that? That looks like good treasure.
Child: Yeah.
Parent: It looks different to other - to other feathers, doesn't it?
Child: Yeah, let's keep it.

Parent: Oh there's another feather. Wow, look at that feather. Can you see how different it is to this one?
Child: Yeah.
Parent: Look, this one is a bit rough and that one's quite smooth, isn't it?



PARENTS ENCOURAGED CHILDREN TO OBSERVE NATURE CAREFULLY, SUCH AS THESE FEATHERS.

Parents encouraged their children to think about biological processes by encouraging them not only to notice and name objects, but to think about what happens over time and why.

- Parent: What do you think that is then? What do you think used to be there?
Child: A hedge.
Parent: Not a hedge. What is it?
Child: A stool.
Parent: No, should I tell you what it is?
Child: What?
Parent: It's a tree trunk.
Child: Is it?
Parent: So, what used to be there?
Child: A tree.
Parent: Yeah, but what's happened?
Child: Someone cut it down.
Parent: Yeah, it has been cut down, isn't it? It could've been cut down a long time ago and that was just still left there because you can't move that. Why can't you move that?
Child: It's because it's stuck down to the ground because of the roots.
Parent: That's right, yeah.
Child: You can't break the roots.
Parent: Yeah, it's stuck in the ground. The roots are down far in the ground.
- Parent: What do you think these are?
Child: Don't know.
Parent: No, they're from a tree. Little seeds. Do you think the birds eat them?
Child: Maybe the birds eating them maybe the birds eating the seeds.
- Parent: So what are the birds looking for in the grass now?
Child: Food.
Parent: Yeah you won't find food - much food in the grass. What you normally...
Child: No.
Parent: ...find in the grass? W...
Child: Worms.
Parent: Worms, isn't it.
- Parent: Do you know how butterfly do you know what, what it is first, before it becomes a butterfly?
Child: Mn-mn.
Parent: It's a caterpillar.
Child: Oh
Parent: And then they go into a special cocoon. And then they turn into butterflies.
Child: Ick.

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Parent: How do the bees make honey, do you know?

Child: Rock. No.

Parent: They go the bees go to flowers.

Child: Rock. The muddy one over there.

Parent: The bees go onto flowers, they get the special pollen off the flowers...

Child: And then they make honey.

Parent: ...and they make it into honey.



PARENTS ENCOURAGED THEIR CHILDREN TO THINK ABOUT BIOLOGICAL PROCESSES SUCH AS HOW BEES MAKE HONEY.

Nature as a space of imagination

Many children and parents talked about aspects of nature that they did not observe but remembered, hoped to find, or could imagine finding in that space, including birds, bees, roots, seeds, rabbits, worms, moles, crickets, and squirrels.

Parent: Oh look, there's a hole.
Child: Yeah, I think a mole lives here.
Parent: Do you think so?
Child: Yeah. Don't you?
Parent: A mole, oh my gosh.
Child: Moles live in the whole city.
Parent: In the whole city?
Child: Yeah.

Children sometimes talked about elements of nature as magical. One child said: "The wind must be magic".



SOME CHILDREN AND PARENTS TAKING PART IN PHASE 1 OF *MAKING SPACE FOR NATURE* SPOKE OF THE WIND AS MAGICAL. OTHERS SPOKE OF WIND AS A PHYSICAL FORCE THAT SHAPED THE TREES AROUND THE PARK.

Children and parents also spoke of imaginative, metaphorical ideas inspired by the scenes around them. One child told a story about seeing birds on the school grounds and noticing a resemblance between the birds and younger school children.

- Child: Hey, mum, can I tell you my funniest thing ever?... There was a crow, there was a bunch of crows walking on the donut like they were the little class that plays on there.... like they were reception class that plays on the hill... They were like [makes numerous stepping sounds] on the ground... they were like this on the hill.... they were ... like they were the reception class that plays on the hill... Crows, crow school.
- Parent: Crow school? What do you think crows learn at crow school then?
- Child: How to fly and how to catch their own food probably.

Nature is not always appealing

Children and parents expressed a range of emotions toward nature, including disgust and fear. Not everything in nature is beautiful; nature can also be disgusting or frightening.

- Child: Ugh, mummy, I just seen a spider eating a flying ant.
- Parent: Did you?
- Child: Yeah.
- Parent: A spider eating a flying ant.
- Child: Yeah.
- Parent: Was he saying, mmm, delicious.
-
- Parent: What else might we find? Ooh, stinging nettles.
- Child: Yeah.
- Parent: Ooh, you don't want to touch them.
-
- Parent: Why do you reckon they fenced this off?
- Child: I don't know, dangerous?
- Parent: Why would...
- Child: Grass snakes.
- Parent: Ooo.
- Child: Perhaps.

Not everything shiny is treasure

Sometimes families expected to find something nice and discovered the opposite. In these cases, families' disgust and fear were directed not toward nature, but toward litter and other types of waste. Disgust and fear about litter and waste had a strong emotional tone.

- Child: Shiny.
- Parent: Where can you see shiny? Go down to the fence, have a look what it is.
- Child: [Running] It looks shiny. I'm getting closer. It's rubbish? [Sighs]
- Parent: What is it? Oh, not more rubbish again.

Child: Yeah.
Parent: Oh, wow, that's not very good, is it?
Child: [Makes noise]
Parent: So, from far away that did look really shiny, didn't it...
Child: Yeah.
Parent: ...as if it was going to be nice treasure, but it definitely isn't. It's just more rubbish again.

Families talked about litter not simply as unattractive or disappointing, but also as a threat to safety. Parents warned children about items or areas that they perceived as dangerous.

Parent: Whoa. No, we're not touching that. Ych, ych.
Child: But...
Parent: We're going on a litter pick at this stage. All right, that's pretty grim down there, we're not going down there.
Child: But there's silver here.
Parent: I know there's silver there...
Child: No, I mean actual silver.
Parent: ... and I know there's tin down there et cetera...
Child: Actual...
Parent: ...but, oh, that's really dangerous.'



How can our community connect with nature?

Children and parents expressed appreciation for and connection to nature. Parents suggested ideas for nature-focused activities together, such as “Let's go and see the plants that the school have grown over here”, “Shall we see if we can find any birds?”, and “Can you see any special creatures in the ground?” Children also suggested nature-focused activities together, such as looking for sticks, looking for animals, looking at the colours of leaves, catching leaves and making a bouquet, and touching, feeling, and smelling different elements of nature. Children appreciated the topography of the park, especially running up and down a hill “because it’s fun”.

Parent: What other type of things would you like to pick up that will make you happy?

Child: Leaves.

....

Child: A stick makes me happy

Child: I want to pet that seagull.

Parent: You wanna pet the seagull?” [Laughing]

Child: Yeah. Can - but Mummy, if it sees you, yeah, you have to go still. Okay? Or it'll go away. And no talking.

Protecting nature

Children and parents talked about what people and communities can do to help nature, about the inherent value of nature, and about protecting nature for nature’s sake.

Parent: Yes. Oh, look, a tiny little flower all on its own. Oh.

Child: Oh, let's not pick him.

Parent: No, let's leave him grow, shall we?

Child: Yeah.

Parent: By here look, it’s where Ysgol Pen Rhos have planted. Here look. They’ve planted the trees, look.

Child: Why did they put this fence over it?

Parent: To stop people vandalising it.

Child: Like cutting it.

Parent: Because they’re in there to grow, they are.

Many families commented with pride on the plants and trees that were planted by the school community.

Parent: Let's go and see the plants that the school have grown over here. Yeah?

What is needed?

Children and parents talked about the need to improve Seaside Park and the surrounding area. Rubbish and dog poo were the dominant themes for improvement. Vandalism was also a frequent theme. Families had clear ideas about how people could improve the park: by not leaving waste, by throwing things in the bin, and by treating the park with respect. Families mentioned the need for better maintenance of the natural space and making it more accessible and safer. Children and adults also talked about the need for more trees and more diverse habitats for wildlife, as well as removing fences around trees.

Parent: Oh I see more. More rubbish.

Child: More yucky, yucky, yucky.

Parent: Yucky treasure.

Parent: Oh, what are people like huh?

Child: We've walked in them.

Parent: Oh, people are so gross.

Child: People are so gross.

Parent: Why – why are people throwing litter all over the field.

Child: Dirtying.

Parent: Yeah, it is. It's spoiling it, isn't it? Because what should we be doing? We should be trying to keep our place where we live nice and what?

Child: Safe.

Parent: Safe and clean.

Parent: We don't like the rubbish on the floor, do we? And we don't like people leaving their dog poo, do we?

Child: Mm-hm.

Parent: They, they must clean that up. That's naughty.

Parent: I don't know why they lock them away in there, in case someone breaks them or something I suppose, vandalism.

Even when talking about rubbish, waste, and vandalism, children and parents often spoke with respect and hope for nature in their community.

Parent: Oh... look at these. What do you think of these? They're pretty, huh? I don't know what they are, though.

Child: Leave the flowers alive.

Parent: I know, isn't it funny how they can grow up in all that mess?

Child: Why are they growing in all that mess?

Parent: Because I suppose pretty things can still grow...

Child: ... we like beautiful flowers, don't we?

Parent: Yes. Yes.

Child: And we're going to keep them alive, 'cause they have, 'cause they have a life like us.

Conclusions

Phase 1 of our project yielded quantitative and qualitative evidence about the benefits of natural environments, in particular local parks, and about the barriers that will need to be addressed to increase those benefits for the Glanymor community. The survey that parents completed provided valuable initial evidence that spending time in local parks is associated with stronger feelings of community connection, an important aspect of wellbeing. The conversations between children and parents as they explored Seaside Park together provided naturalistic, open-ended evidence about what people value about nature in the local community and what they want to improve. Values included the beauty and variety of nature as well as the rights of other living things. The conversations also provided evidence of the many ways that spending time in nature can stimulate children and support their healthy development. Children and parents expressed curiosity and wonder about the natural world, and parents helped their children observe and reflect about elements of nature in the park, using rich descriptive language in the process. Children and parents also identified many ways that Seaside Park should be improved, including reducing rubbish, dog waste, and vandalism, as well as improving the park with more trees and other plants.

Children and parents spoke of the natural world with respect.

We're going to keep them alive... 'cause they have a life like us.

Acknowledgements

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Making Space for Nature

Phase II Report

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Summary of the report

This document summarises the preliminary findings of the co-design workshops with children and the school staff carried out during the second phase of work during Making Space for Nature project. The second phase of the project aimed to engage Ysgol Pen Rhos school and the community in design thinking around how communities connect with nature and with each other and co-produce recommendations about making space for nature in the existing community and future development. The benefits of nature for children and young people's mental health and wellbeing are well established in research, yet children are spending less time outdoors than ever. Increased urbanization process largely ignores designing nature experiences for people in cities (Duron-Ramos *et al.*, 2020), however this is one of the priority areas identified by Public Health Wales.

We engaged Year 6 children of the school in a series of four workshops using creative making tasks around themes such "What is nature?" "What is community?" and "How can we connect communities with nature?" working collaboratively with Urban Habitats and Learning through Landscapes. For the tasks we adapted the methods used by Khan, Smith, Harris, and McVicar (Cardiff University, 2022) in a recent project in the Cardiff area and Khan's previous research projects (Khan *et al.*, 2020) in London and Bangladesh and engaged children in drawing, photo-walk, mapping and model making.

Preliminary analysis of data collected over the course of four workshops reveal that children generally were very much open about their feelings and thoughts about nature and community and articulated well what they preferred to have in their community to make more room for nature. Children expressed that nature is very important to health and community.

Analysis of children's maps and drawings of where they find nature in their communities show that children were aware of the boundaries and spaces within the school and beyond. Children find most nature in the forest and Seaside Park and less so in streets, brown field behind the school and recycle centre. Most children think the school grounds and that the school building and classrooms should welcome more nature too. While children spoke affectionately about the opportunity to connect with nature in their community by growing vegetables and flowers, walking in the forest, building den, playing with conkers, enjoying the vista and fresh air, they expressed negative feelings around 'rubbish', plastics, ill maintenances of public spaces, lack of vegetation, unpleasant smells, noise from cars and unsafe streets.

The ideas shared by children to improve surrounding spaces to make more space for nature can be grouped into four broad themes- 1) green/blue spaces (some examples are: different types of vegetation, flower gardens, woodlands and forests, greener streets, wild life corridor etc), 2) parks and playgrounds (age appropriate and disabled friendly play equipment, more benches, lights and bins, dog-park etc) 3) mobility and safety (wider footpath, closing the streets in front of the school to cars, less traffic, appointing park monitors, accessible footpaths for the disabled) and 4) making space for nature in the school (making school ground greener with diverse vegetation, wildlife sanctuary instead of car park, more seating, hopscotch, greening the classrooms etc).

Children also prioritised ideas they would like to see implemented in short, medium and longer term. Some of the ideas that children think are important and should be implemented now are: creating room for more wildlife, safe and lively streets, play opportunities and accessible paths for disabled children and people, more play features in school grounds and keeping the school grounds and neighbourhood clean. Further co-design with children from different age groups and co-production of specific ideas with children are recommended along with creating more nature-rich environments in school grounds and capacity building of teachers to take lessons outdoors.

Introduction

The benefits of nature for human health and wellbeing are well researched and evidenced by numerous research studies (Dadvand *et al.*, 2015; Malone and Waite, 2016; Khan and McGeown, 2019). Importance of connection with nature at all ages is undeniable however ‘direct experience of nature during childhood are fundamental moments for sustainable enculturation with long lasting consequences for sustainable social-ecological systems’ (Curries and Deschenes, 2016; p.2). However children’s nature experiences have significantly diminished across the globe (Louv, 2008; Curries and Deschenes, 2016). Although access to nature including green and blue spaces is identified as one of the priority areas in creating healthier places, increased urbanization process largely ignores design and planning of nature experiences (Duron-Ramos *et al.*, 2020).

Researchers from Cardiff University have been working in partnership with Ysgol Pen Rhos, Urban Habitats, and Learning through Landscapes to inform interventions for creating nature access in a new development (Pentre Awel) on an 83-acre site in South Wales along the Llanelli coast. In doing so we worked with children, schools, and families in the area surrounding Pentre Awel to co-produce plans for natural spaces in the existing community and the future development.

This report summarises the findings of Phase 2 of the project: Making Space for Nature which adopted a design thinking approach to engage the community. Design activities during four workshops and two drop-in sessions allowed children and staff to explore what nature and community are, how they have experienced nature in the past and how they would like to experience nature in their local community in the future. This phase was led by Matluba Khan, Cardiff University in collaboration with Learning through Landscapes. Ysgol Pen Rhos and Urban Habitats were co-producers as well as beneficiaries of this output. The making contexts elicited design ideas that fed into an action plan for making space for nature (the third phase of our project) and thus has the potential for yielding long-term benefits for the community.

Our approach for Making Space for Nature

In Phase 2, we worked with Learning through Landscapes to develop hands-on tasks to elicit design thinking around how children and adults connect with nature and with each other. We built on a recent Cardiff University civic mission project in which we engaged children and young people in a Cardiff community to develop a recovery plan for the neighbourhood (Cardiff University, 2022) and previous work co-designing with children and young people (Khan *et al.*, 2020).

We engaged the pupils, teachers, and other staff at Ysgol Pen Rhos with creative-making tasks around themes such as “What is nature?” “What is community?” and “How can we connect communities with nature?”. We held separate design sessions for children and staff to ensure accessible opportunities for participation for all (see Table 1).

26 Year 6 children participated in a series of four workshops: Knowing my community, walk and talk, making space for nature and what should happen now. A series of creative tasks- drawing, mapping, stickering, model making, walking around the neighbourhood appropriate for the age group were designed and delivered during October 2022.

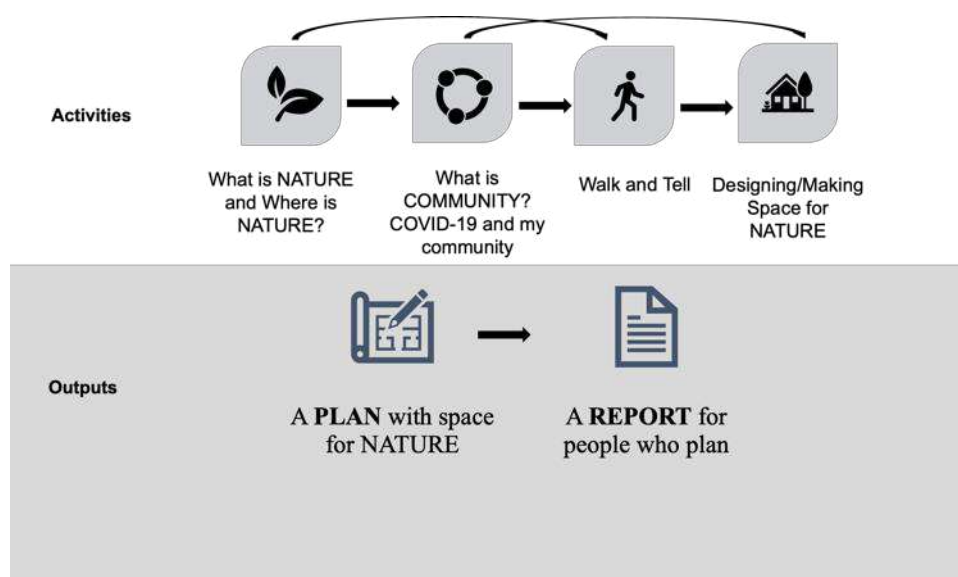


Figure 1: Activities of and outputs from Phase 2.

For school staff we adapted the methods used by Khan *et al.*, (2020, 2021) and Learning through Landscapes in their projects, using open-ended conversational approaches to identify barriers and challenges to engaging with teaching outdoors and engaging with natural environments more generally. The design session for school staff was led by Learning through Landscapes in conjunction with Phase 2 lead. At least 25 staff participated in two workshops delivered in the format of drop-in sessions where teachers could take some time based on their availability to drop in and share their ideas through mapping, drawing and stickering.

Table 1: Questions and themes explored during the workshops with children and staff

Workshops with the children
<p>Workshop 1: Knowing My Community</p> <p><i>Question 1: What is nature?</i> <i>Question 2: Where is nature? How communities connect with nature?</i> <i>Question 2: What is community? Who is part of the school community?</i> <i>Question 4: How COVID-19 affected communities' connection with nature?</i></p>
<p>Workshop 2: Walk and Talk</p> <p><i>Question 1: What elements of nature are there?</i> <i>Question 2: What sort of things are there in the space? Are there any benches, bins, fences?</i> <i>Question 3: What sort of activities can you do here to connect with nature and community?</i> <i>Question 4: How can you move around, on foot, by bike, on a scooter or a wheelchair?</i></p>

Workshop 3: Making Space for Nature

Question 1: What would you like to see to improve the neighbourhood? You can consider the following:

-Green spaces/blue spaces

-Travel and transport:

-Activities

-Things/objects:

Question 2: How can you have more nature?

Workshop 4: What should happen now

Question 1: What matters in the short-, medium- and long-term?

Question 2: Which two ideas should take priority?

Question 3: What about all the other ideas. Who should be responsible for developing them?

Table 2: Questions and themes explored during the workshops with staff

Workshops with staff

Theme 1: Where are we now?

Question 1: What is nature?

Question 2: What is community? Who is part of the school community?

Question 3: What is on the map? – nature (or lack of), community facilities, obstacles to teaching outside.

Theme 2: Where do we want to be?

Subtheme 1: Playing outside

Subtheme 2: Taking lessons outdoors

Subtheme 3: Children connecting more with nature

Theme 3: Creating a vision for the school grounds and local outdoor space

Theme 4: How can we get there?

Subtheme 1: The type of activities the staff would like to see the children engage with outdoors

Subtheme 2: The type of spaces the staff would like to see in the school grounds and the neighbourhood

Subtheme 3: Applying some of the changes the staff would like to make to a large map of the area

What is Nature?

Preliminary analysis of the drawings and conversations during the workshops with children reveal that Children in general associated ‘nature’ with green and blue and animate and inanimate objects found in their surroundings. These are - trees, plants, leaves, flowers, grass, branches, soil, rocks, mountain, waterfall, sun, dog, birds, butterflies, bees, sheep, duck, crow and moth. Children considered human as part of nature, they also referred to elements that do not generally come up in discussions around nature-like mold, winter, cave etc. Children referred to their feelings when they discussed ‘what is nature’, that they felt better in a green space compared to a rather grey/brown space.

“It just feels like now you will get better!”

“Nature is me! I am a part of nature.”



Figure 2: Children’s drawings of ‘What is Nature?’

The staff’s ideas of what they felt nature were: outdoor green spaces, trees, grass, ponds, plants, wildlife, outdoors puddles, wild areas, playing space etc. The staff also referred to the sensory aspects of nature as they mentioned about ‘smells’ and ‘touch’ while referring to how children connected with nature by collecting, enquiry, growing, discovering, pond dipping etc.

As well as the physical elements of what nature is, staff demonstrated that they also understood that people’s relationship with nature was an important factor in itself. Their focus was on the needs of children so features mentioned including wild areas, playing spaces, trees and wildlife were important but so were the types of activities that children could take part in – pond dipping, exploring, enquiry, collecting etc. as well as the experience gained from nature such as smell and touch.

This will be significant when considering how the grounds and local spaces might be developed. Nature should be at the heart of the experiences for children in the school and also for the spaces that children can access nearby to the school.

Where is Nature?

Both children and staff mapped nature and the lack of nature on a large map in separate workshops. Children also walked with us in the school grounds and the neighbourhood and talked about ‘nature’ in the route we took. Children also took pictures of the elements of nature that are important to them- what they like, what they did not like and what they would like to improve.

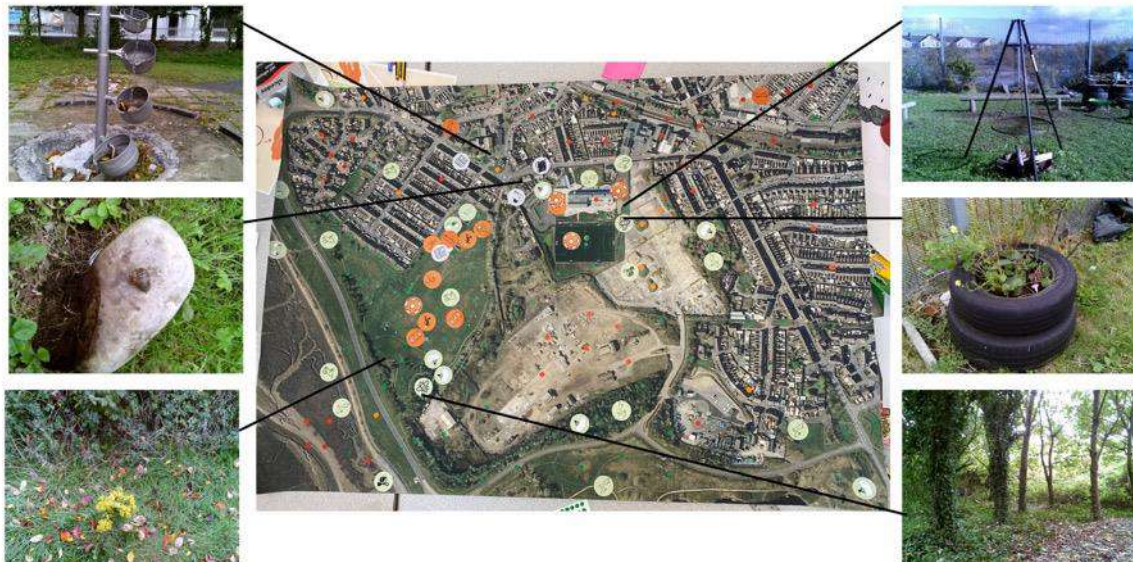


Figure 3: Children’s mapping of where nature is along with photos taken by the children.

Both children and staff recognized that nature was located in the woodlands, Seaside Park, the space near the community hall and undeveloped spaces near to the main roads. They also judged the area around the school i.e. the brown field next to the school, the scrapyards/recycling centre and the streets, to have a lack of nature.

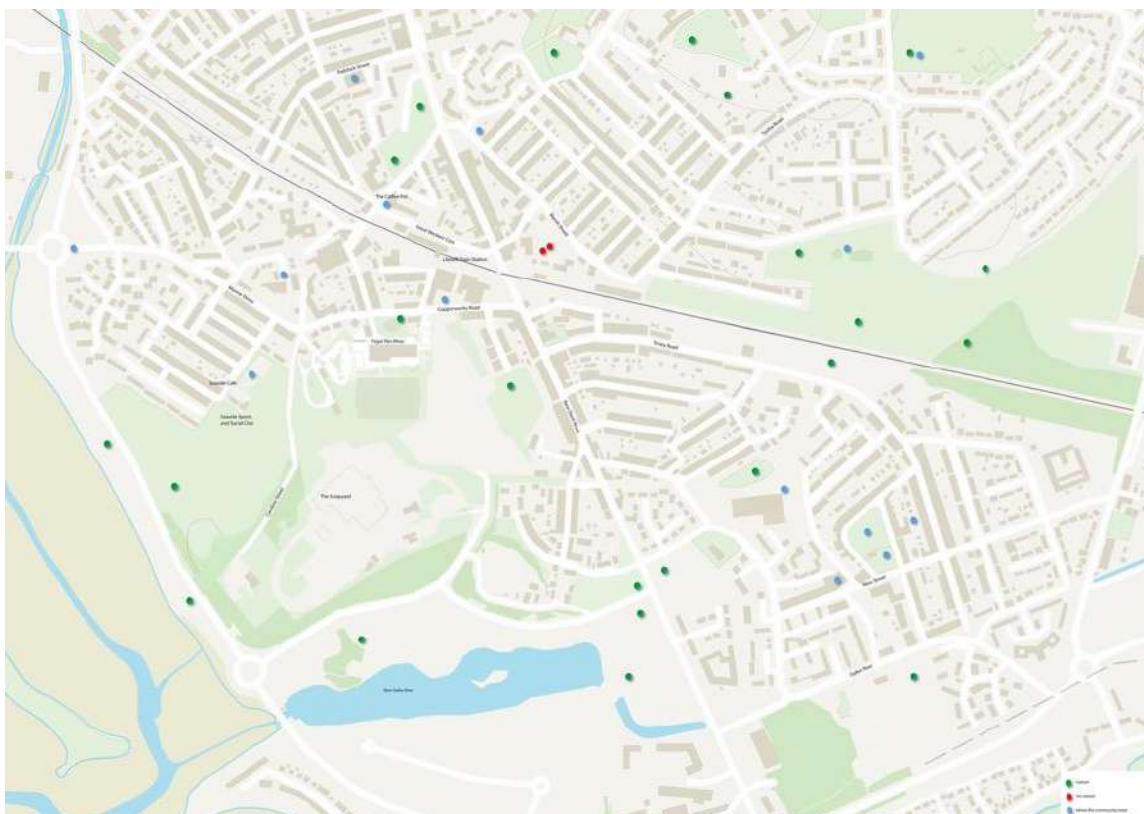


Figure 4: Where is Nature –mapping by children (top) and staff (bottom)

Where is nature in the school grounds?

Children in general identified a lack of nature in the school grounds and in the school building. The place most children liked in the school ground is the fire pit, beehive, the sheds and the rainbow room. The children expressed mixed feelings about 3G pitch, and the MUGA and mentioned these to be ‘designed only for footballers’. Children also mentioned a lack of nature in the apparent ‘green’ doughnut in the grounds and on the terrace, for some of them the doughnut is boring while some other found interest in just roaming around the area and watching others play.

***“I like the rainbow room, You can be who you want
and not be judged.”***

“I do not like car park because it is too busy.”

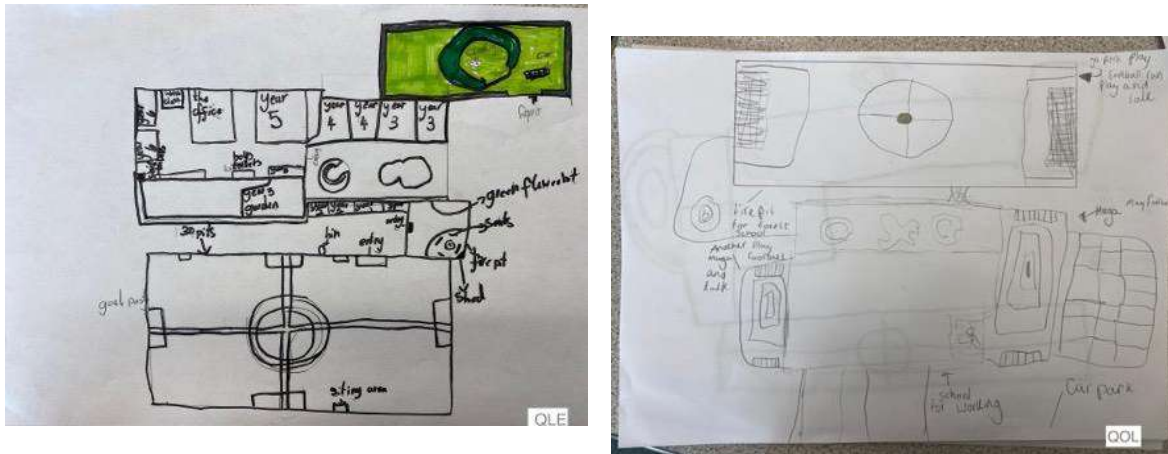


Figure 5: The school ground as drawn by two year 6 children

Children mentioned that there were fewer opportunities for play for girls and older children in the school grounds. The lack of opportunities for different peer groups to play together (prevented by the fences) was also highlighted. Children shared a liking for forest school days particularly roasting apples and marshmallows in the fire pit area was mentioned as a favourite activity by many children.

The staff felt that there were currently obstacles to teaching outside, particularly focusing in on the school's grounds. This included: lack of nature and a natural environment, the need for shelter in the school grounds, adults preventing things happening and the lack of knowledge and confidence among staff.

What is community?

The most agreeable definition of community based on children’s drawings and conversations with them is ‘bunch of people coming together to do stuff’. However, children do not define ‘community’ in a simplistic manner and have shared rather mixed notions of what community is highlighting both the positives and negatives. Children did consider that some aspects of living as part of the community are about agreeing on things like protecting environment and helping other people, but people may disagree on things as well. Children’s definition of the community is wider and includes nature and non-humans like trees, plants and animals.

“Community are people who are together focused on something.”

“Community is not only family and friends but also trees, plants and animals.”



Figure 6: A child’s response to ‘What is Community?’

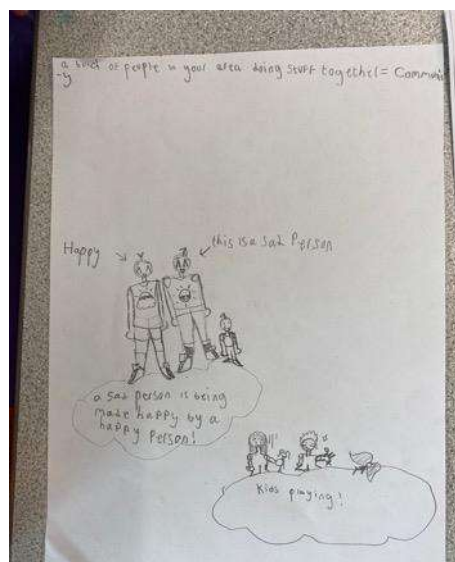


Figure 7: ‘In a community a sad person can be made happy by a happy person’

Staff’s definition of community as relationships, communication and ‘people working together to help each other’ resembled with how children perceived ‘community themselves. Their consideration of community was also focused on the ‘school community’ identifying who and what they felt the school community included. According to the staff the school community includes: governing body, the church and Pastor Swan, Zion Chapel, councilors, Antioch centre, Myrtle House, support services (e.g. Team Around the Family-TAF, social services, Ed Psych, Education Welfare Officer-EWO, Flying start etc), football team, rugby team and also staff, children and parents,

Both children and staff’ reflections show that they see the school is at the heart of the community and that it both supports that community and is supported by it. Formal and informal organisations are both identified with the final comment – ‘people working together to help each other’ – showing how community is expressed and valued by the school community itself.

How COVID-19 affected my community?

Both children and staff mentioned that the stricter restrictions during COVID-19 lockdowns in Llanelli affected how communities connected with nature. Most children and adults stayed mostly at home during the pandemic restrictions with reduced connection with nature. Children expressed that they felt 'shocked', 'confused', 'bad', 'angry', 'sad', 'depressed', 'scared', 'annoyed', 'lonely', and 'isolated'. However, some children also mentioned feeling 'happy' since there was no school but at the same time feeling bored of staying at home.

The pandemic has affected communities in unprecedented ways. Underserved communities have been affected the most. The benefits of nature for children's mental health and wellbeing are established. As we are coming out of the pandemic, we need to make more space for nature in our surroundings. The next section will present how we can make more space for nature.

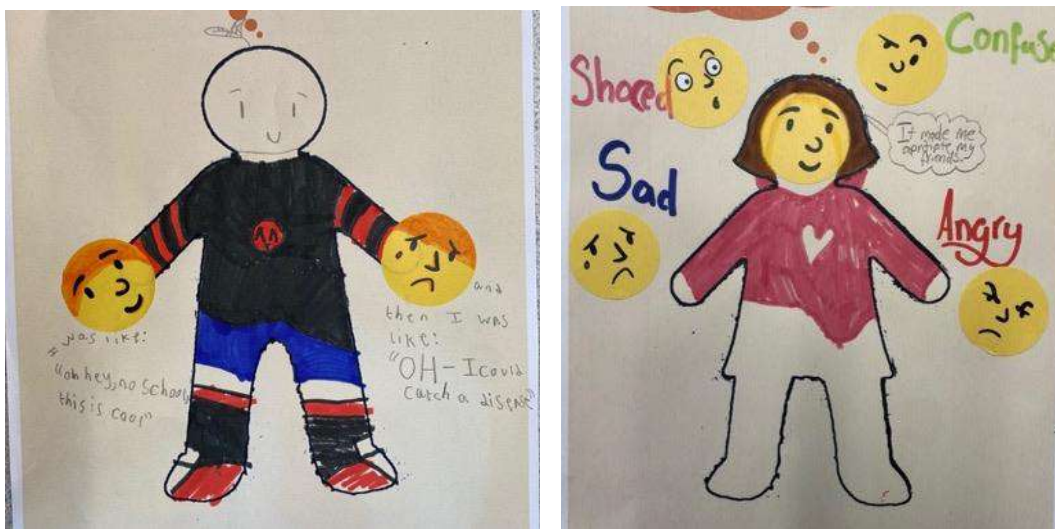


Figure 8: Children shared their emotions during COVID-19 lockdown

How can we connect communities with nature?

In relation to how communities and more specifically children and young people can connect with nature, children were asked to think about the activities they would like to do outdoors e.g. play and socialization and the kind of spaces can enable these to happen. Children shared their ideas through conversations during walk and talk (Workshop 2), individual brainstorming/drawing and drawing on tracing paper on a large map (Workshop 3). They also made models to demonstrate how the redesigned space could look like, four groups focused on four separate areas – school grounds, the sea-side park, the scrap yard and the street in front of the school.

Through these activities children shared their preferences for spaces in the school grounds and the surrounding neighbourhoods, how spaces can be improved to have more opportunities for play and socialisation, and have more nature. This created the basis for a prioritising exercise during workshop 4 when children expressed their opinions for what ideas can be taken forward in current, short and long terms.

The staff were asked to look at connecting the school and wider community with nature in a number of different ways: through considering the activities they would like pupils to undertake outside including

lessons, outdoor play and specific activities to connect them with nature. They also chose from a selection of images to identify activities that they would like their pupils to 'join in with' and the type of spaces and features that they would like to see in their school grounds and local area, adding reasons for their choices to the images.

Through these activities they demonstrated their needs and ideas for the school grounds and local spaces, how they could be used by the school and community and how nature could be focused on, and they started to identify the types of changes that could be made within which naturally divided into three specific areas – play, outdoor lessons, and growing and cooking, nature and community featuring across all three.

On day one staff wrote down ideas of what they would like children to be able to experience and on day two they voted for their favourites. This created the first stage in the prioritising process. Access to nature has been incorporated into the following three headings: play, teaching and learning, growing and cooking as seen below.

The ideas shared by both children and staff around how we can make more space for nature in the school grounds and surroundings can be discussed under four broad themes- 1) green/blue spaces 2) parks and play 3) mobility and safety and 4) making space for nature in the school.

1. Green and blue spaces

Both children and staff have wanted more green and blue spaces in their community for the sake of nature itself- for love of nature and for nature to grow in the community. Children also think having more and diversified green and blue spaces around them would make everyone happier,

'I want more trees, and different types of trees. Trees just make people feel better.'

Children wanted to have different types of vegetation, woodlands and forests, rows of different types of trees along the streets, a wildlife corridor, habitats for wildlife, bug hotels, and bird feeders to attract birds. Children and staff also wanted the scapyard to be turned into small farm where children can grow vegetables and feed animals.

Children did not always specify how they would connect with these places but thought these spaces should be there for the people and the planet.

2. Parks and playgrounds

Children identified that the playgrounds and spaces for children in parks are inadequate in size and cannot cater for the needs of different age and gender groups. The play equipment available were also identified as 'not challenging enough' for older kids and not accommodating disabled children. There are not enough play pitches for different groups to play. The poor lighting condition of parks was also mentioned as well as a lack of enough bins. Children wanted the parks and playgrounds to be designed for use by all kids and at times when it is dark early.



Figure 9: A child's drawing indicating their love for nature.



Figure 10: Wolf way – children desired a wildlife corridor in the neighbourhood

The staff wanted to see children to be able build dens and have playhouses, to visit the seaside, to smell plants, flowers and grass, and to climb trees. The staff thought that the children should have opportunities of stepping on wet grass in their bare feet, playing in sand, swinging, accessing natural materials, taking part in planting, growing fruit and vegetables, visiting Sandy water park and exploring different water habitats including both fresh-water and the beach. The staff also wanted to see ‘messy play’, and risk taking, with opportunities to climb and explore, taking time to look down, up, see, think and wonder.

The children wanted to improve Seaside Park, the scrapyard behind the school and turn them to a place where everyone has opportunities to play. The ideas to improve the conditions of playgrounds and park suggested by children are – bigger playgrounds for children, dog parks, skatepark, football pitches, play equipment/play items for babies, younger children and older kids, swings for disabled children, water area/lake play and more benches, lights and bins in the parks and playgrounds.

The ideas shared by children resonate well with what staff suggested. The ideas that got most support amongst staff were to have play equipment for all ages and to create an ‘adventure area’, or adventure park, to have access to woodland areas, having a construction area, playhouses and rope swings, and having sand areas to ‘put your feet in’. According to both children and staff, play spaces should

incorporate areas of scented plants, water play, splash pool, features for children to climb and jump off, materials to build dens with and spaces for them to talk and co-operate with each other, sand and mud to dig into and places and spaces to run in. In addition to making changes to spaces, staff think wet weather clothing would also extend the time children can spend outdoors and play in the rain.

Creating spaces with natural play features and loose parts, including planting and supported by training for supervising staff, will provide many of the experiences staff would like for their pupils. These types of spaces provide children with access to nature every day and will not only provide a wide range of play opportunities (affordances) but have also been shown to support good mental health and wellbeing – providing children with access to nature on a regular basis (Khan and McGeown, 2019).

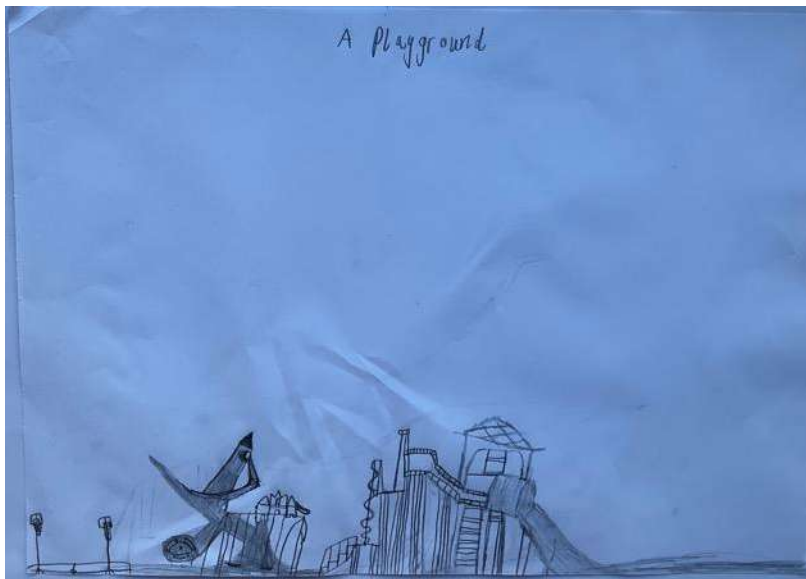


Figure 11: Children wanted challenging play equipment in their neighbourhood



Figure 12: Children's schematic design ideas for the scrapyard next to the school

3. Mobility and safety

Children attributed their lack of independent mobility and limited time spent outdoors to the perception of safety and risks of injury at busy roads. Many children shared horrified stories of car accidents at roundabouts and that they did not feel safe being out on streets. Children also mentioned noise pollution because of cars. Children's enjoyment of nature and connection with nature in the woodlands was also interrupted by the noise of cars from the highway-B304.

Many children mentioned about commuting to school by car but expressed an interest in biking, scooting or walking to school instead. They shared that closing off the streets in front of the school to cars is important for children's safe access to school. Children also wanted the streets and footpaths to be sociable place. They thought this could be achieved by widening the footpaths and installing seating and more planting.

Children's thoughts resonated with what staff shared during the workshop who asked the Copperworks Road to be closed off to traffic. Both children and staff highlighted the need for safe access from the school to the beach, which could be via a bridge over the road with oak trees planted alongside. While both children and adults love to spend time at the beach they mentioned safety issues and asked for better access to the beach with bilingual signs about tide times. The staff shared about the necessity of a life saving centre/club for children.

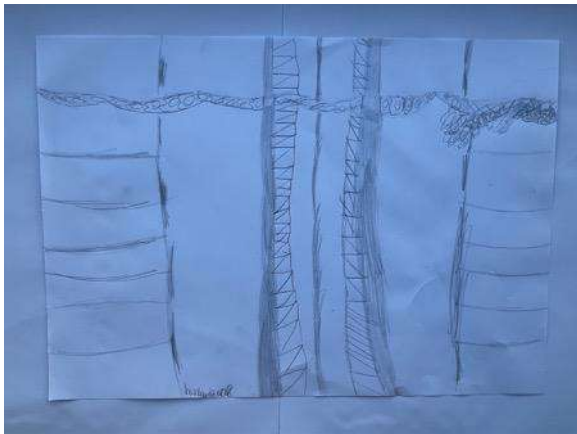


Figure 13: A child's drawing of the school street



Figure 14: A group model exercise of school street

Children and staff further asked for reducing the speed of the main road to 20mph. The children also think the speed on B304 should be reduced to 20 mph while some also mentioned about 'getting rid of cars'. Low traffic neighbourhoods are favoured by children while they asked for better public transport options with more bus stops. Making roundabout safer for cars was also a priority for children.

Children mentioned fear of kidnappers, and antisocial behaviour in parks and playgrounds. Children asked for more community police and park monitors so that they could feel safe when outdoors. Both children and staff mentioned about accessibility issues for disabled children and people and shared that it is absolutely essential to make the footpaths and roads disabled friendly.

'We would like the community police to help with antisocial behaviour because people don't always behave well in the park e.g. people smash glass on the roads and parks.'

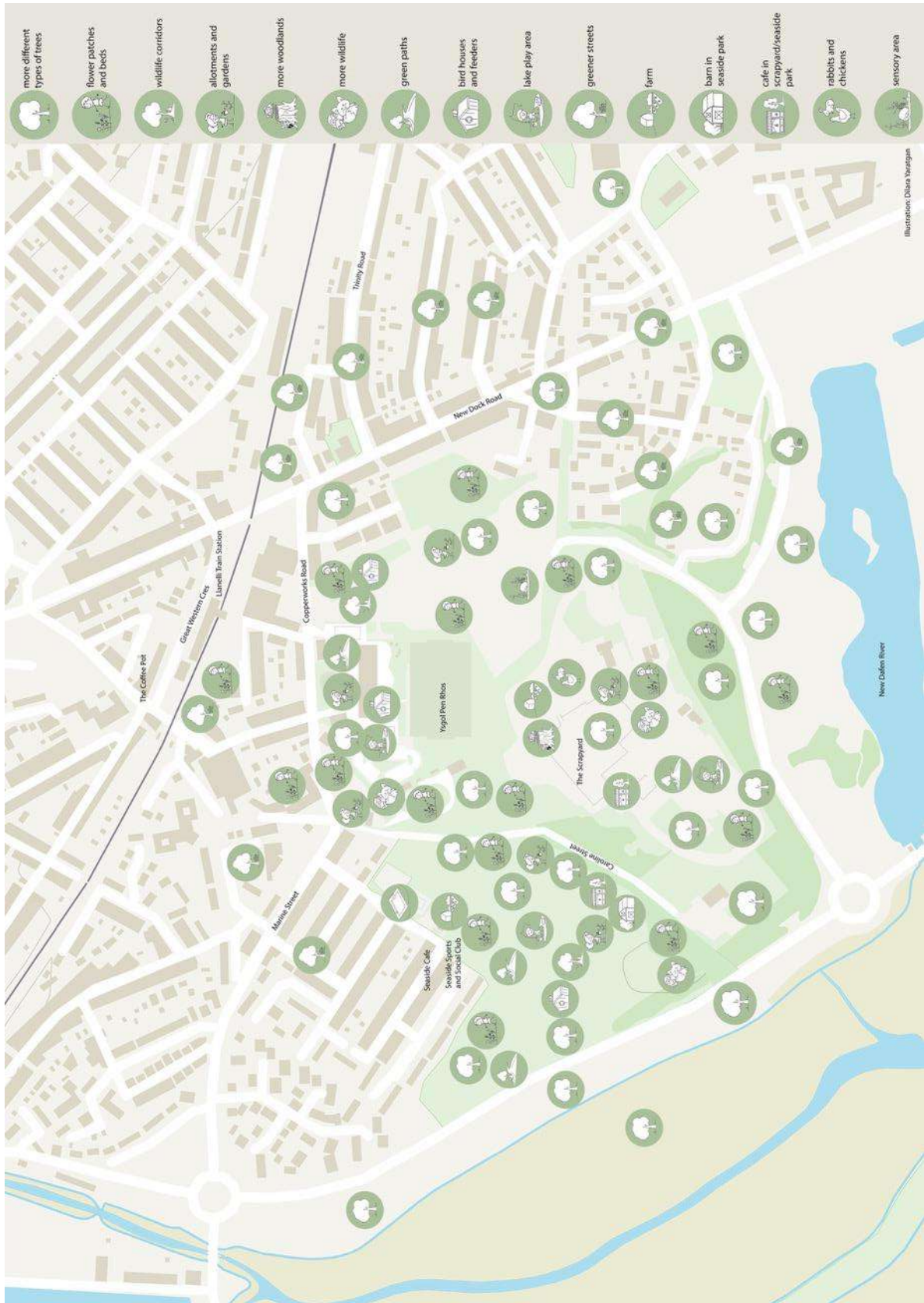


Figure 15: Ideas for green and blue spaces in the neighbourhood (Graphic works: Dilara Yaratgan)

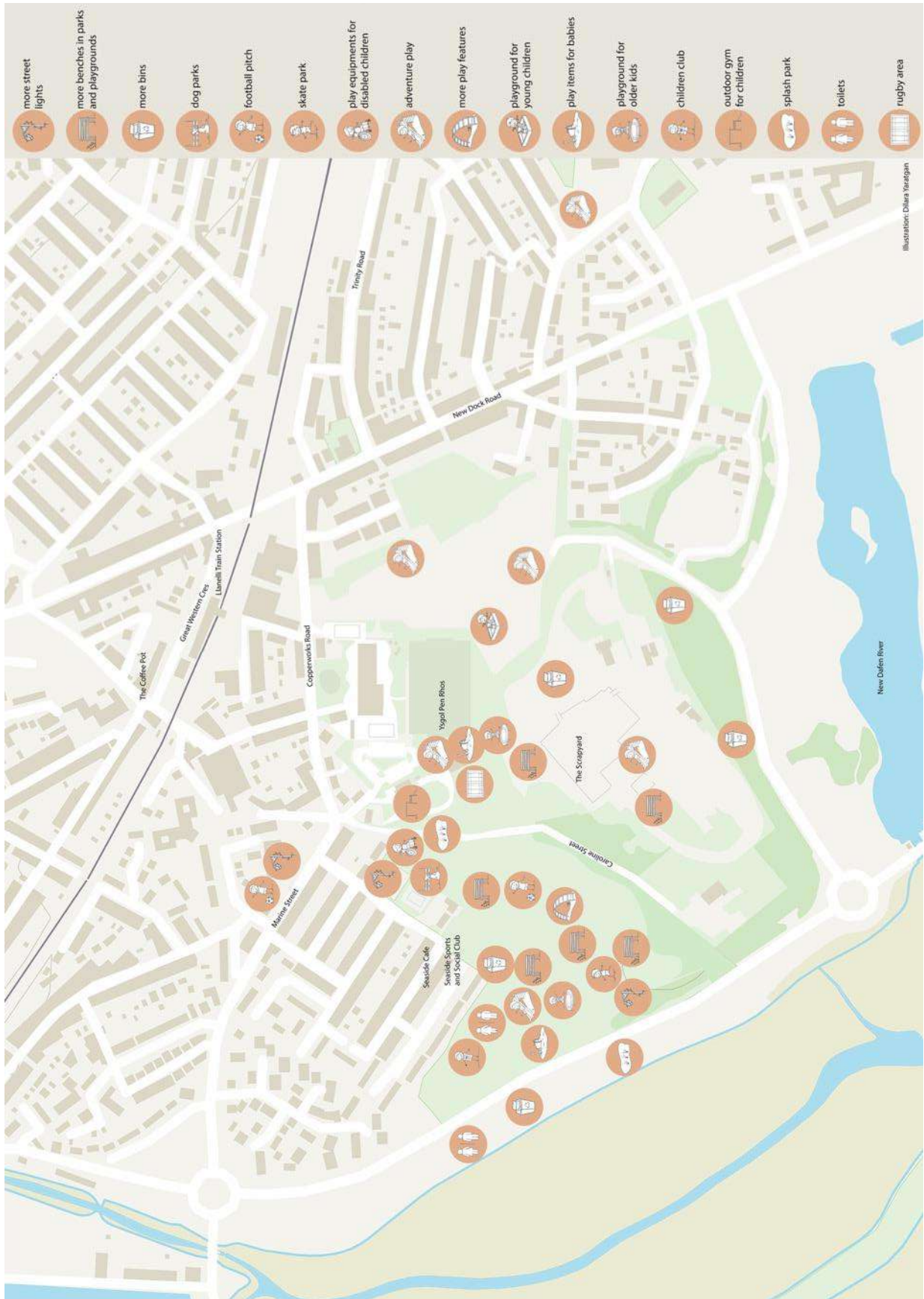


Figure 16: Children’s and staff’s ideas for improvements of parks and opportunities for play (Graphic works: Dilara Yaratgan)

4. School grounds

Children in general loved their school grounds while also mentioned that there is a lack of nature- ‘real green’ in their school grounds. Many children found school grounds exclusively designed for boys and mostly footballers and that there were fewer opportunities for non-footballer boys and girls to play or engage with other activities. In general children wanted more trees and different types of plants and trees, more flower gardens in their school grounds. Children wanted to create a wildlife sanctuary in their school grounds replacing the current car park. Children also wanted more opportunities for play with their older and younger peers and asked to remove the fences between different play areas. Children shared their ideas on a tracing paper overlayed on the map and made a model for their desired school grounds. Ideas shared by children further included:

- More pot plants to make classroom greener
- More beehives
- Improvement of fire pit area
- Better school sheds with beanbags, bookshelf, plants, a messy play area
- Hopscotch
- More challenging play features
- Greener doughnut and 3G pitch
- Improvement of MUGA with options for non-footballers
- Signage for better access
- More benches



Figure 17: Children’s drawings with ideas for improving their school grounds



Figure 18: A child’s idea for improving the school shed



Figure 19: A child’s model of a lake play area in the area next to school grounds.

Using a tracing-paper overlay the staff added their ideas to improve their grounds and local area. This is where the staff started to dream! Whilst some of the ideas might feel fanciful or beyond reach there are elements that are not expensive and could be easily added to the school grounds in particular.

Ideas shared by the staff included:

- A sensory garden and den building area were suggested additions to the school grounds
- The area alongside the sports pitch in the grounds could be an obstacle course developing independence and risk taking
- A sensory area was also suggested for the grounds
- A growing area towards the front of the school – with fruit and vegetables that the children, and families, could buy
- A rugby pitch should be added to the school or nearby
- Animals for the grounds – both domestic and wildlife, including chickens and rabbits
- A treehouse and a mud kitchen
- A shelter for reading
- Outdoor toilets
- An area of go-carts
- A nature area with a pathway and trails



Figure 20: Staff's ideas for improving the school ground and neighbourhood

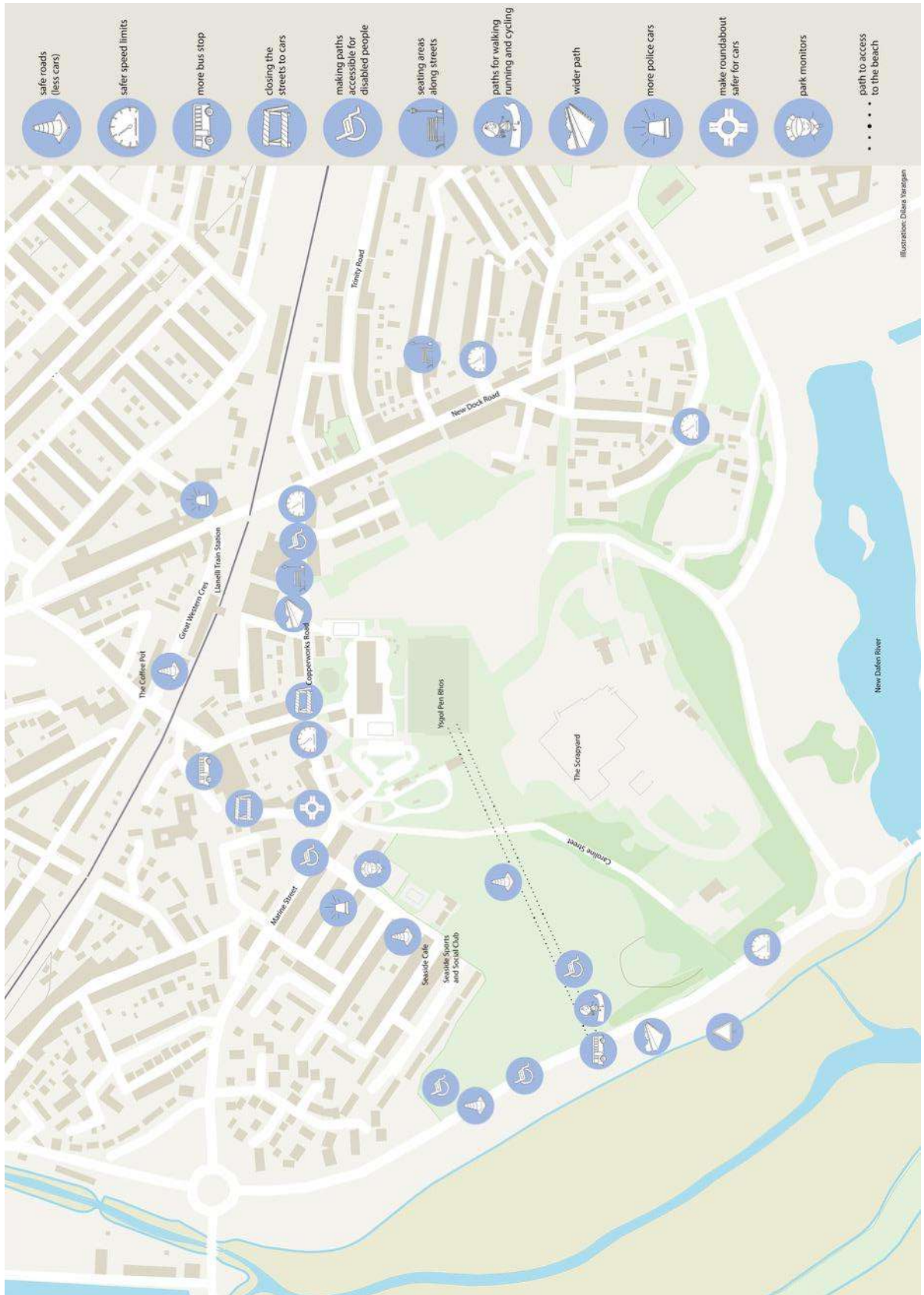


Figure 21: Children’s and staff’s ideas for improvements of neighbourhood for mobility and safety (Graphic works: Dilara Yaratgan)

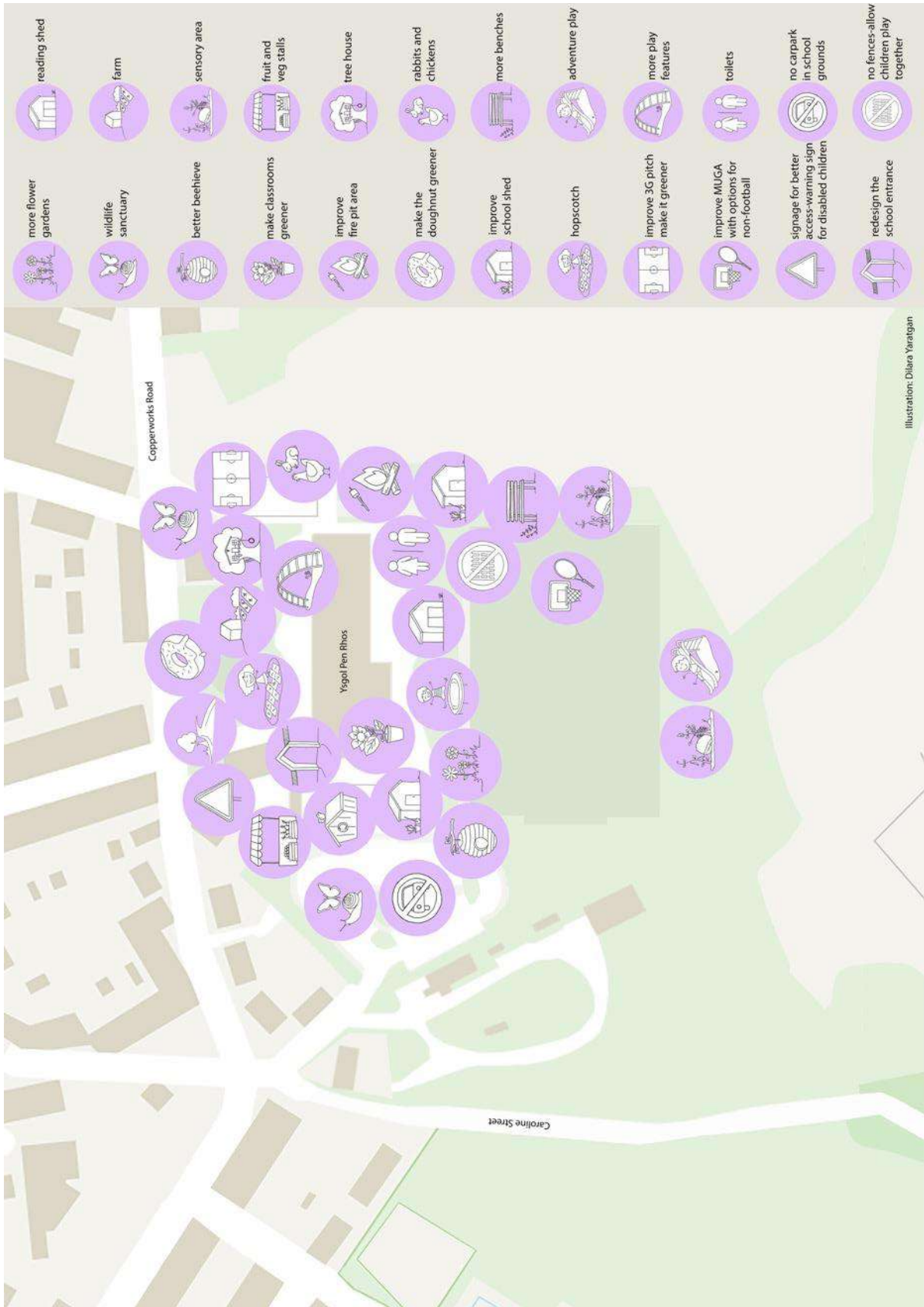


Illustration: Dilara Yaratgan

Figure 22: Children's and staff's ideas for improvements of schoolgrounds (Graphic works: Dilara Yaratgan)

Teaching and learning in the school grounds

There was a real enthusiasm shown for teaching outside. It was felt that staff could be creating opportunities to use more outside areas in school and their local area. They felt this could be enhanced by using nature and natural materials to teach outside whilst creating a shelter would enable lessons to be taken outdoors more often. Staff felt there were a lot of transferable skills to be developed outside as well as opportunities to develop greater independence.

With the school already keeping bees this was seen as one opportunity to teach about the natural world but several could see even more potential for teaching about nature through the school grounds. This included growing flowers, fruit and vegetables as well as delivering more lessons outside and forest school activities.

The staff selected a range of images that showed growing and cooking outdoors – from children growing fruit and vegetables to a pizza oven and cooking over a campfire. The change that received the most votes from staff was to bring animals into the grounds with chickens specifically mentioned as an example.

Developing a more flexible approach to teaching and taking lessons outdoors 'when the mood takes us' can help achieve the goal of taking lessons outdoors. Two teachers believed that all lessons [by which we can take they mean subject areas] can be taken outside, using nature and natural objects to help teach all areas of the curriculum.

On the practical side staff wanted a shelter or outside teaching space to be created to enable more lessons to take place outdoors in all weathers. They wanted trees to be planted that would succeed as there were concerns that the trees planted when the grounds were created were not growing. The addition of more plants and man-made habitats to attract wildlife as well as changing the management of existing areas and habitats would also enable more lessons about the environment to take place outdoors whilst clipboards and pencils would support a wide range of learning outside.

To enable more growing and cooking existing areas, or new areas, of growing and cooking could be developed further. This could also be used as a space for community involvement from parents, grandparents and other community members working with the pupils to grow fruit and vegetables in after school clubs, or hosting community events such as barbecues. The addition of shelter would also extend the use of the grounds both by the school and wider community.

5. What children and staff did not want to see in outdoors

Children and staff also commented on what they would not want to see in the school grounds and local outdoor spaces. This included: unhappy children, plastic, rubbish, disengaged children, dog poo and a lack of respect for the land.

'We would like some extra bins around the community. We saw a lot of litter and this made us feel sad.'

The focus both on 'things' and attitudes is significant, demonstrating the holistic approach that is needed to make changes successful.

What do we prioritise in making space for nature?

During workshop 4, children prioritised their ideas by sorting cards into what they considered most important and should be done in short term (now), medium term (2-3 years) and long term (4+ years). Although children were explicitly asked to consider what is most important to them regardless of resources or time, children sometimes made their judgements based on preference (i.e. what they liked or wanted), sometimes based on importance (i.e. what they considered a fundamental principle or human right), and other times based on the availability of resources (i.e. how much something might cost and/or how long it might take). Nevertheless, children discussed the ideas amongst themselves, negotiated their preferences with their peers and developed a consensus within their group.

Children prioritised the opportunity and the right to play and be active for all children. They felt strongly about having play equipment that disabled children can use, and wanted the paths, parks, playgrounds and beaches to be accessible for all children. Children predominantly wanted a hopscotch in the school grounds (some wanted a hopscotch in Seaside Park), however their visualisation of hopscotch was far more complex than one would imagine. A child drew a hopscotch made of moveable, plant-filled boxes, where she acknowledged that even if the plants were damaged by play the hopscotch can be rebuilt.



Figure 23: Children's voting of the most preferred ideas that can happen now

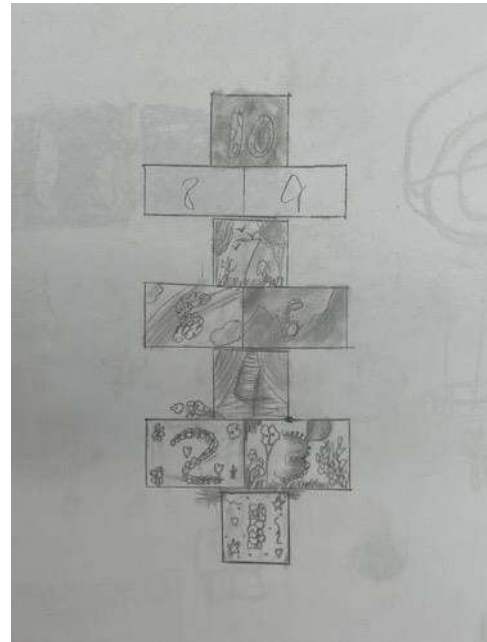


Figure 24: A child's vision of a hopscotch in their school grounds

Some children were particularly appreciative of nature in their neighbourhood and that there should be more spaces for wildlife to grow and be within the community in the form of wildlife sanctuary, a wolf way/wildlife corridor was on their priority list too. Children also had an appreciation for beauty and colour and prioritised gardens and allotments, they wanted to grow foods that can feed other people too. More importantly children asked for a cleaner neighbourhood which can be achieved by providing more bins around the neighbourhood and in the park. Each group put forward two ideas for actions that can happen now and children voted for their most preferred ideas. The ideas that got most votes are

- 1) Hopscotch that indicates children's need and desire to play and be active and
- 2) More wildlife in the neighbourhood which indicates children's love for nature for the sake of nature.

Over the two days of consultation the staff developed vision statements for the school grounds and wider outdoor spaces. Combining key elements of the four statements produced combined with their other input over the two days we can see that their priorities were: children and families using the grounds to experience more nature-based activities and learning, developing their skills and supporting children's growth. They wanted the school to be proud of their grounds and to use the space as a place to learn about their environment and how to care for it.

A suggested vision statement could be:

Our school grounds will be a safe place for both school and community where our children can build confidence and independence, learn, play and experience the natural world, developing knowledge and skills about the environment and how to care for it.

More specifically the staff priorities were:

- To provide children with more safe opportunities to have regular contact with nature both in the school grounds and wider local area
- To keep more animals in the school grounds, such as chickens and rabbits and to develop pupils' understanding of the natural world
- To take more lessons outside, with sheltered areas created in the school grounds to support this
- To enable children to take part in more imaginative and expressive play, to get messy and to take risks as they develop skills and independence
- To provide children with experiences outdoors that they cannot have inside such as growing and cooking their own crops

Conclusion and forward actions

The aim of Phase 2 of our project Making Space for Nature was to co-produce recommendations about making space for nature in the school grounds, existing community and potentially within future developments including Pentre Awel. Over the course of six workshops children and staff explored what kind of opportunities are there in the school grounds and in the local neighbourhood for children to play, learn and connect with nature and how the area can be improved further to address issues identified and to have more spaces for nature. This report presents a preliminary analysis of the data gathered during the course of the workshops.

While children in general liked their school grounds and neighbourhood, they also identified some gaps-issues around road safety and accessibility, lack of natural features and limited opportunities for play for different age and gender groups and disabled children. Children shared their ideas to improve what they have and address some of the issue identified during the process. Similarly, staff expressed their enthusiasm for taking lessons outdoors and providing children with an appropriate environment for play and learning.

Based on the preliminary analysis of data from co-design workshops with children and staff, the following will help the school to fulfil its vision and priorities:

- Creating a more nature-rich environment in the school grounds
- Providing children with opportunities across the curriculum to learn outside more
- Providing children with opportunities to take risks within a safe natural play environment
- Enabling children to engage more with the natural world, through improving and enhancing nature around them, through messy and nature-based play environments and activities, through more lessons about, through and in nature.
- Introducing more animals, both domestic and wild, into the grounds – helping children to understand how to care for other living things as well as supporting their mental health
- Enabling children to grow food in their own grounds and make connections with the community.
- Providing staff, both teaching and non-teaching, with support to enable them to take more lessons outside, to engage their pupils more with the natural world and to support nature-based play. These could include resources like Teaching the Primary Curriculum Outdoors (Learning Through Landscapes, 2022) along with CPD to boost confidence amongst staff to take lessons outdoors and make the most of the available resources.

While further in-depth analysis of the data will be carried out recommendation for forward actions include

- **Further co-design activities with children of different age groups**, more specifically adolescents- We acknowledge the activities have been conducted with only one year group from the school during phase 2. Children from different age groups have diverse needs and preferences and for development of a child friendly plan it is important to consult children from different age groups. Adolescents are particularly left out during this process whose voices are important for creating spaces.
- **Implementation of ideas from the co-design workshops**- it is important that the ideas shared by children and staff through a rigorous process are taken seriously and that efforts are being made for delivery of ideas generated during the workshops. The implementation process may start with *actioning on at least one idea that is regarded by children as the most important and should be happening 'now'* and simultaneous planning should be happening for implementation of ideas in short, medium and long term. Some ideas generated may be delivered without huge cost and some may be initiated by the school themselves with support from partners.
- **Further development of specific ideas** through co-design when selected for action/real life installation- It is important to engage children and staff throughout the process of development and therefore further co-design workshops with children should be conducted when ideas are selected for action.
- **Co-production of a neighbourhood place plan** incorporating the ideas from co-design workshops- this phase presents a schematic place plan showing the approximate location of each ideas. This can be further developed through co-production workshops with urban designers and planners.

Acknowledgement

We thank the energetic and enthusiastic children of Ysgol Pen Rhos for sharing their expertise, knowledge and insights, and the committed and dedicated staff for their time. We thank Merideth Gattis, Mark Drane and Karolina Wysocka for supporting the facilitation of the workshops. We are grateful to Professor Merideth Gattis for leading the project and creating the space for this collaboration. The project was funded through ACCELERATE, Clinical Innovation Hub, Cardiff University.

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Appendix 2: Mapping of Where is Nature?



Figure: Mapping of 'Where is Nature?' by children



Figure: Co-created map of 'where is nature' by the school staff

Appendix 3: Walk and Tell activities with children

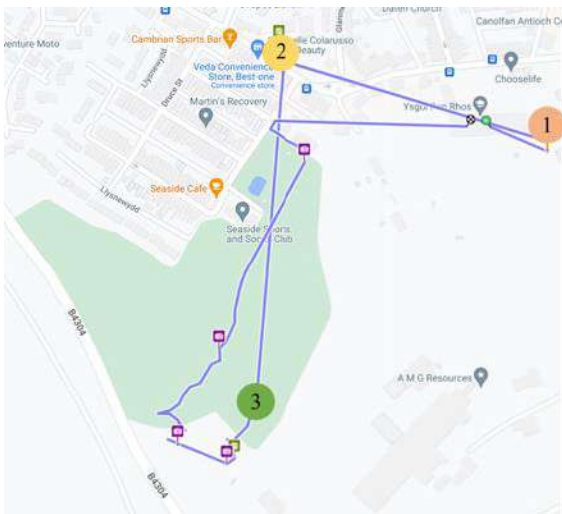


Figure: Walking Route (Created by Mark Drane) We walked and talked (Photo: Matluba Khan)

Spot 1: forest school area

Things: fire pit, kitchen place, trees, flower beds, tires, grass, tent, and storage shed

Activities: plant things, grow food, sit, cook apples, marshmallows

👍 flowers, trees, grass, fire pit, kitchen

👎 rubbish, safety fence, shed

Effects: use restrictions

Redesign: more plants, litter picking

Spot 2: pocket park

Things: grass, bushes, leaves, trees, snail, rocks, benches, wooden planks, sculpture, and plastic

Activities: walk over, sit, play

👍 flowers, leaves, grass

👎 rubbish, plastics, cracks on the paves

Effects: did not use this space

Redesign: Proper maintenance of the pot sculpture and the area, cleaning of the place, not good for wheelchairs

Spot 3: the hill and woods

Things: hill, trees, grass, mushrooms, fences, pitch, goal posts, colors, insects, and wind

Activities: roll down the hill, play, walk, collect blueberries

👍 flowers, leaves, fresh air, den, view from top, benches, trees, vista

👎 rubbish, smell, bottles, noise, unsafe

Effects: more plants now

Redesign: more flowers, bird nest, bug hotel, bins, bigger garden, more play opportunities, sitting in dens

Table: Summary of findings during walk and tell workshop

Children drew their favourite places/things from the walk

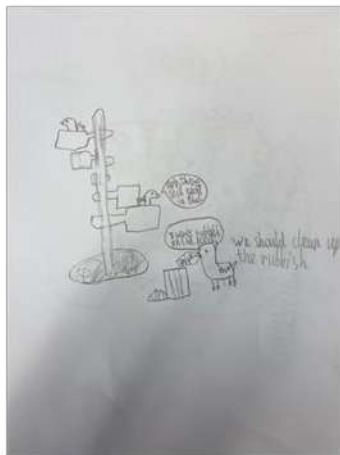


Figure: Children's drawings following the walk and talk



Figure: The street in front of the school



Figure: The school grounds

Appendix 5: Examples of places that offers nature play, messy play, loose parts play and risky play.



Natural play spaces (Photo: Learning through Landscapes)



Messy play (Photo: Learning through Landscapes)



Loose parts (Photo: Learning through Landscapes)



Risky play (Photo: Learning through Landscapes)

Appendix 6: Examples of teaching and learning outdoors



Examples of learning about nature (Photo: Learning through Landscapes)





Other examples of learning outdoors (Photo: Learning through Landscapes)



Examples of spaces to gather in (Photo: Learning through Landscapes)



Examples of Growing (Photo: Learning through Landscapes)

Appendix 7: Mapping children's prioritisation activities

	Green and Blue Spaces Team S	Green and Blue Spaces Team M	Parks and Playgrounds Team S	Parks and Playgrounds Team M	Mobility and Safety Team Q	Mobility and Safety Team C	School Ground Team Q	School Ground Team C
Short Term (Now)	Allotments and gardens Flower patches and beds Greener streets More different types of trees More woodlands Bird houses and feeders Wildlife sanctuary	Greener streets More woodlands Flower patches and beds More different types of trees Green paths Birdhouse and feeder Allotments and gardens Lake play area	More bins for disabled children Dog parks Play items for babies More play features More benches Adventure play	Play equipments for disabled children More lights in the park More play features More bins More benches Adventure play	Safe speed limits Make roundabout safer for cars Safe speed limits Making paths accessible for disabled people Park monitors Paths for walking, running and cycling Seating areas along streets	Making paths accessible for disabled people Safe roads (less cars) Safe speed limits Seating areas along streets More police cars	Better beehive and beds Flower patches Make classrooms greener Improve 3G pitch - make it greener Signage for better access-warning sign for disabled children Make the doughnut greener Improve school sheds Wildlife sanctuary Bird houses and feeders Farm No carpark in school grounds. More benches Improve fire pit area with more green	Hopscotch Make classrooms greener Improve fire pit area with more green Improve school sheds Better beehive
Medium Term (2-3 Years)	Wildlife corridors Lake play area Green paths More wildlife	Wildlife corridor More wildlife Café in scrapyard / seaside park	More lights in the park Skate park Playground for older kids Football pitch	Playground for older kids Play items for babies Playground for young children	More police cars More bus Wider footpath	Wider footpath Make roundabout safer for cars Park monitors Paths for walking.	Hopscotch Improve MUGA with options for non-footballer	Flower patches and beds Signage for better access-warning sign for disabled children Make the doughnut
Long Term (5+ Years)	Barn in seaside park Café in scrapyard / seaside park	Barn in seaside park	Adventure play	Dog parks Skate park	Closing the streets to cars	Closing the streets to cars More bus stops	Redesign the school entrance No carpark in school grounds	Redesign the school entrance No fences-allow children to play together No carpark in school grounds Wildlife sanctuary Improve 3G pitch - make it greener Improve MUGA with options for non-footballer Farm



URBAN HABITATS
thinking | strategy | making

Actions for Nature

Making Space for Nature, Executive Summary
by Urban Habitats

in collaboration with Ysgol Pen Rhos; Cardiff University;
Carmarthenshire County Council; Learning Through Landscapes;
Hywel Dda University Health Board; Cynon Valley Organic
Adventures

December 2022

The Accelerate Programme

This project was sponsored by the Accelerate programme, a healthcare innovation programme aligned with Welsh Government's Well-being of Future Generations Act (Wales) 2015 and A Healthier Wales Plan for Health and Social Care. Accelerate is funded by Welsh Government's European Regional Development Fund (ERDF) and delivered by the Life Science Hub Wales in partnership with Cardiff University, Swansea University and The University of Wales Trinity Saint David. Accelerate enables collaboration between enterprises, healthcare professionals and academia to engage in innovative, evidence-based health and social care solutions.

Cardiff University's Clinical Innovation Accelerator (CIA) uses a flexible approach to develop and support Accelerate-sponsored projects such as The Outdoor Partnership's 'Opening Doors to the Outdoors' project, enabling agile innovation and collaborative working to achieve long-term improvements in health and well-being outcomes. The infrastructure provided by the Accelerate programme was designed to promote sustainable economic development for Wales, to achieve increases in employment and to establish sustainable enterprises creating evidence-based health and social care products, services and treatments, with potential for local, national and international impact.



executive summary

about this document

This document is a report that summarises the objectives undertaken as part of the third phase of work during the Making Space for Nature project. It presents an action plan that links together the outputs of each of the three phases.

project setting

Ysgol Pen Rhos is a primary school in Llanelli, Wales. The project has worked with the children of the school and considers both the school grounds and the wider neighbourhood as spaces for nature. The project also considers the wider context including delivery of major investments locally such as the Pentre Awel development.

introduction

Provides background to the project, how this action plan takes a public health and healthy places approach, namely that, "*Health is created and lived by people within the settings of their everyday life: where they learn, work, play and love.*" World Health Organisation (1986)

What we know is that the places where children live, learn, and play have a vital role in health creation. Much of what works for wellbeing in these places such as at the neighbourhood level is well known and yet often it doesn't translate into what happens on the ground.

The action plan takes an approach to child health that prioritises:

- Listening to and involving children and a rights based approach to health
- A wider determinants approach: including the natural and built environment as one such determinant of child health.
- A lifecourse approach: recognising, for example, that half of mental health problems start before the age of 14.
- Working to address health equity.
- A preventative approach

The introduction also outlines the action plan values and how research ethical considerations are managed in relation to the project, under the governance of Cardiff University.

project aims and objectives

Details what happened throughout Making Space for Nature as a project and how each of three phases are interlinked and feed into this action plan report. Those phases were:

Phase 1: Let's talk about nature: conversations between children and parents or caregivers as they explore natural and built environments locally.

Phase 2: Making space for nature: co-design activities where children explore how they have experienced nature in the past and how they want to experience nature in the future in their local area. This phase includes staff engagement also.

Phase 3: Actions for nature (this document): preliminary action plans linking children's priorities to wider context / policy / opportunities. Including an open community & stakeholder event on the theme "My environment, my future".

phase 1 | let's talk about nature

This summarises the preliminary reflections from this phase which mainly comprised undertaking the activities and research data collection for future potential analysis. These reflections address questions of:

- What is nature?
- Nature as a space of imagination
- Connecting with nature
- What is needed for nature

phase 2 | making space for nature | co-design with a class of year 6 pupils

This part summarises a co-design approach with children at Ysgol Pen Rhos across four workshops to consider questions of:

- What is nature?
- What is community?
- How can we connect communities with nature?

The ideas developed with children to improve surrounding spaces to make more space for nature can be grouped into four broad themes and these themes inform this action plan:

- Green/blue spaces: some examples are: different types of vegetation, flower gardens, woodlands and forests, greener streets, wild life corridor etc.
- Parks and playgrounds: age appropriate and disabled friendly play equipment,

more benches, lights and bins, dog-park, etc.

- Mobility and safety: wider footpath, closing the streets in front of the school to cars, less traffic, appointing park monitors, accessible footpaths for the disabled
- Making space for nature in the school: making school ground greener with diverse vegetation, wildlife sanctuary instead of car park, more seating, hopscotch, greening the classrooms, etc.

phase 2 | making space for nature | school staff sessions

This overview of engagement with staff at Ysgol Pen Rhos presents the results of exploring questions including:

- Where are we now?
- Where do we want to be?
- How can we get there?

Three different aspects of being outside were highlighted by the staff:

- Play
- Teaching and learning
- Cooking and eating

And staff developed a vision statement that highlights the need for the school grounds and local areas to be nature-rich:

'Our school grounds will be a safe place for both school and community where our children can build confidence and independence, learn, play and experience the natural world, developing knowledge and skills about the environment and how to care for it.'

phase 3 | actions for nature

The action plan is presented here and supported by a detailed set of appendices which are for future reference and use in developing forward actions.

This phase sought to answer the following questions:

- Who else (people / organisations / groups) is working on this already or has skills to do so?
- What policies or strategies do they have in place already that would support children's ideas?
- What specific projects or investments do they have happening already, small or

large, that could support putting children's ideas into action?

A supplementary question and benefit that was not necessarily envisaged at the start was:

- How could the project Making Space for Nature help stakeholders to answer their own questions; improve the involvement of children; and fill gaps of understanding in relation to children's priorities.

This phase consisted of the following activities:

Who is already working in the area? Joining up the dots:

- Speaking with people doing good work already
- Understanding specific existing policies, strategies
- Understanding specific existing plans, projects, investments

Site visits:

- Wider area site visit – urban design review
- End of school street traffic – school journeys
- The Goods Shed - interest in outdoor biodiversity & play

Visiting case study examples:

- Community garden at Cynon Valley Organic Adventures
- Community solar & community gardens at Energy Gardens at Brondesbury
- School mobility and active travel improvements at Waltham Forest

Stakeholder engagement was a significant element of this phase and the following groups were directly spoken with:

Project partners

- Cardiff University
- Urban Habitats
- Learning Through Landscapes
- Hywel Dda University Health Board
- Cynon Valley Organic Adventures
- Carmarthenshire County Council

Project collaborators

- Ysgol Pen Rhos
- Cardiff University

Stakeholders

- Carmarthenshire County Council (10 different teams / departments)
 - Pentre Awel Development
 - Economic Development
 - Housing
 - Highways and Transport Division, Environment Department

- Forward Planning Section, Planning Division, Environment Department
- Biodiversity
- Homes and Safer Communities
- Education & Children's Services Department
- Education & Inclusion Services
- Family Information Service, Childcare and Play Team
- Hywel Dda University Health Board
- Llanelli Town Council
- Other stakeholders listed in the report

From this engagement an opportunities list was prepared that detailed organisations; policies / strategies; projects / opportunities. These are presented in detail in [Appendix 2](#). These opportunities were then mapped across the co-designed themes above. This is the key summary of the action plan and this table is presented on the following pages as part of this Executive Summary.

Co-design during this phase has been one that maintains children's ideas: not reframing children's ideas into the priorities of other people. It is about being led by the children's priorities.

This action plan did not undertake to review potential sources of funding however certain potential sources were identified and are noted.

A key gap also identified is how the area around Ysgol Pen Rhos / Seaside, which is a fairly small area, tends to fall between areas of larger strategic plans and this is demonstrated in this report. As a result development of this area with historic and current industrial uses has been piecemeal and reactive rather than planned and proactive. A recommendation is made for co-design of a neighbourhood plan to provide a planned framework for children's ideas to be put into action.

Figure: examples of children's co-designed themes.

Nature in my community	Play and parks	School grounds	Travel and safety
Green / blue spaces; biodiversity; nature for nature's sake.	Parks and playgrounds; recreation and socialisation, e.g. activities children do and/or people they might meet.	School grounds; making space for nature in school grounds; play facilities in school grounds.	Mobility and safety; including mobility, access, risk, safety, cleanliness.
			

conclusion and forward actions

The recommended forward actions from this plan are:

- **Co-design and co-production approaches:** to be integral to any future work.
- **Evidence-based actions that can happen now!** 13 evidence-based ideas for short term implementation have been presented. These can be developed and delivered with children.
- **Create a co-designed neighbourhood plan:** strategies for the area around Ysgol Pen Rhos and Seaside deal at larger scales and have a tendency to overlook this immediate area. This could also be part of a Place Plan. A small task to start this could be a school route review by children with support.
- **Future research and analysis:** of data collected during this project in Phases I and II. Opportunities to develop this should be sought.
- **Ownership of the plan with capacity:** this should be considered by the project partners to identify the capacity, required resources, and support needed to make this happen.

Theme	Nature in my community	Play and parks	School grounds	Travel and safety
Theme detail	Green / blue spaces; biodiversity; nature for nature's sake.	Parks and playgrounds; recreation and socialisation, e.g. activities children do and/or people they might meet.	School grounds; making space for nature in school grounds; play facilities in school grounds.	Mobility and safety; including mobility, access, risk, safety, cleanliness.
Organisations / groups	Making Space for Nature partners Ysgol Pen Rhos – wider school community Ysgol Pen Rhos – Eco / School Council Hywel Dda University Health Board CCC – Pentre Awel CCC – Economic Development CCC – Housing CCC – Forward Planning CCC – Biodiversity Many groups focussed on species (moth, fungi, red squirrels, etc.) Llanelli Town Council Many wider community groups National Botanic Garden of Wales The Goods Shed Public Services Board	Making Space for Nature partners Ysgol Pen Rhos – wider school community Ysgol Pen Rhos – Eco / School Council CCC – Pentre Awel CCC – Forward Planning CCC – Biodiversity Llanelli Town Council Many wider community groups National Botanic Garden of Wales The Goods Shed Public Services Board	Making Space for Nature partners Ysgol Pen Rhos – wider school community Ysgol Pen Rhos – Eco / School Council Cardiff University – PharmaBees CCC – Biodiversity Many groups focussed on species (moth, fungi, red squirrels, etc.) CCC – Air Quality & Environmental Health CCC – Healthy Schools CCC – School Improvement CCC / Keep Wales Tidy: Eco Schools	Making Space for Nature partners Ysgol Pen Rhos – wider school community Ysgol Pen Rhos – Eco / School Council CCC – Highways + Active Travel CCC – Pentre Awel CCC – Forward Planning CCC – Biodiversity CCC – Air Quality & Environmental Health Llanelli Town Council Many wider community groups Public Services Board
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Evidence based actions that can happen now!	<ul style="list-style-type: none"> • more wildlife in the local area • more trees in parks • removing fences from trees once the trees are larger • more wildlife habitats 	<ul style="list-style-type: none"> • play equipment that are fun for disabled children • more bins in the parks • rubbish management in parks • dog waste management in parks 	<ul style="list-style-type: none"> • allotments and gardens in the school grounds and local area for growing foods/flowers • hopscotch in school grounds • improving the firepit area in the school grounds with more green • making classroom greener & more wildlife and biodiversity in the school grounds (OMIT car park; ADD wildlife sanctuary specifically) 	<ul style="list-style-type: none"> • making paths accessible for disabled people



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URBAN HABITATS
thinking | strategy | making

Actions for Nature

Making Space for Nature, Phase III Report
by Urban Habitats

in collaboration with Ysgol Pen Rhos; Cardiff University;
Carmarthenshire County Council; Learning Through Landscapes;
Hywel Dda University Health Board; Cynon Valley Organic
Adventures

December 2022

The Accelerate Programme

This project was sponsored by the Accelerate programme, a healthcare innovation programme aligned with Welsh Government's Well-being of Future Generations Act (Wales) 2015 and A Healthier Wales Plan for Health and Social Care. Accelerate is funded by Welsh Government's European Regional Development Fund (ERDF) and delivered by the Life Science Hub Wales in partnership with Cardiff University, Swansea University and The University of Wales Trinity Saint David. Accelerate enables collaboration between enterprises, healthcare professionals and academia to engage in innovative, evidence-based health and social care solutions.

Cardiff University's Clinical Innovation Accelerator (CIA) uses a flexible approach to develop and support Accelerate-sponsored projects such as The Outdoor Partnership's 'Opening Doors to the Outdoors' project, enabling agile innovation and collaborative working to achieve long-term improvements in health and well-being outcomes. The infrastructure provided by the Accelerate programme was designed to promote sustainable economic development for Wales, to achieve increases in employment and to establish sustainable enterprises creating evidence-based health and social care products, services and treatments, with potential for local, national and international impact.



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executive summary

about this document

This document is a report that summarises the objectives undertaken as part of the third phase of work during the Making Space for Nature project. It presents an action plan that links together the outputs of each of the three phases.

project setting

Ysgol Pen Rhos is a primary school in Llanelli, Wales. The project has worked with the children of the school and considers both the school grounds and the wider neighbourhood as spaces for nature. The project also considers the wider context including delivery of major investments locally such as the Pentre Awel development.

introduction

Provides background to the project, how this action plan takes a public health and healthy places approach, namely that, "*Health is created and lived by people within the settings of their everyday life: where they learn, work, play and love.*" World Health Organisation (1986)

What we know is that the places where children live, learn, and play have a vital role in health creation. Much of what works for wellbeing in these places such as at the neighbourhood level is well known and yet often it doesn't translate into what happens on the ground.

The action plan takes an approach to child health that prioritises:

- Listening to and involving children and a rights based approach to health
- A wider determinants approach: including the natural and built environment as one such determinant of child health.
- A lifecourse approach: recognising, for example, that half of mental health problems start before the age of 14.
- Working to address health equity.
- A preventative approach

The introduction also outlines the action plan values and how research ethical considerations are managed in relation to the project, under the governance of Cardiff University.

project aims and objectives

Details what happened throughout Making Space for Nature as a project and how each of three phases are interlinked and feed into this action plan report. Those phases were:

Phase 1: Let's talk about nature: conversations between children and parents or caregivers as they explore natural and built environments locally.

Phase 2: Making space for nature: co-design activities where children explore how they have experienced nature in the past and how they want to experience nature in the future in their local area. This phase includes staff engagement also.

Phase 3: Actions for nature (this document): preliminary action plans linking children's priorities to wider context / policy / opportunities. Including an open community & stakeholder event on the theme "My environment, my future".

phase 1 | let's talk about nature

This summarises the preliminary reflections from this phase which mainly comprised undertaking the activities and research data collection for future potential analysis. These reflections address questions of:

- What is nature?
- Nature as a space of imagination
- Connecting with nature
- What is needed for nature

phase 2 | making space for nature | co-design with a class of year 6 pupils

This part summarises a co-design approach with children at Ysgol Pen Rhos across four workshops to consider questions of:

- What is nature?
- What is community?
- How can we connect communities with nature?

The ideas developed with children to improve surrounding spaces to make more space for nature can be grouped into four broad themes and these themes inform this action plan:

- Green/blue spaces: some examples are: different types of vegetation, flower gardens, woodlands and forests, greener streets, wild life corridor etc.

- Parks and playgrounds: age appropriate and disabled friendly play equipment, more benches, lights and bins, dog-park, etc.
- Mobility and safety: wider footpath, closing the streets in front of the school to cars, less traffic, appointing park monitors, accessible footpaths for the disabled
- Making space for nature in the school: making school ground greener with diverse vegetation, wildlife sanctuary instead of car park, more seating, hopscotch, greening the classrooms, etc.

phase 2 | making space for nature | school staff sessions

This overview of engagement with staff at Ysgol Pen Rhos presents the results of exploring questions including:

- Where are we now?
- Where do we want to be?
- How can we get there?

Three different aspects of being outside were highlighted by the staff:

- Play
- Teaching and learning
- Cooking and eating

And staff developed a vision statement that highlights the need for the school grounds and local areas to be nature-rich:

‘Our school grounds will be a safe place for both school and community where our children can build confidence and independence, learn, play and experience the natural world, developing knowledge and skills about the environment and how to care for it.’

phase 3 | actions for nature

The action plan is presented here and supported by a detailed set of appendices which are for future reference and use in developing forward actions.

This phase sought to answer the following questions:

- Who else (people / organisations / groups) is working on this already or has skills to do so?
- What policies or strategies do they have in place already that would support children’s ideas?

- What specific projects or investments do they have happening already, small or large, that could support putting children’s ideas into action?

A supplementary question and benefit that was not necessarily envisaged at the start was:

- How could the project Making Space for Nature help stakeholders to answer their own questions; improve the involvement of children; and fill gaps of understanding in relation to children’s priorities.

This phase consisted of the following activities:

Who is already working in the area? Joining up the dots:

- Speaking with people doing good work already
- Understanding specific existing policies, strategies
- Understanding specific existing plans, projects, investments

Site visits:

- Wider area site visit – urban design review
- End of school street traffic – school journeys
- The Goods Shed - interest in outdoor biodiversity & play

Visiting case study examples:

- Community garden at Cynon Valley Organic Adventures
- Community solar & community gardens at Energy Gardens at Brondesbury
- School mobility and active travel improvements at Waltham Forest

Stakeholder engagement was a significant element of this phase and the following groups were directly spoken with:

Project partners

- Cardiff University
- Urban Habitats
- Learning Through Landscapes
- Hywel Dda University Health Board
- Cynon Valley Organic Adventures
- Carmarthenshire County Council

Project collaborators

- Ysgol Pen Rhos
- Cardiff University

Stakeholders

- Carmarthenshire County Council (10 different teams / departments)
 - Pentre Awel Development
 - Economic Development
 - Housing

- Highways and Transport Division, Environment Department
- Forward Planning Section, Planning Division, Environment Department
- Biodiversity
- Homes and Safer Communities
- Education & Children's Services Department
- Education & Inclusion Services
- Family Information Service, Childcare and Play Team
- Hywel Dda University Health Board
- Llanelli Town Council
- Other stakeholders listed in the report

From this engagement an opportunities list was prepared that detailed organisations; policies / strategies; projects / opportunities. These are presented in detail in [Appendix 2](#). These opportunities were then mapped across the co-designed themes above. This is the key summary of the action plan and this table is presented on the following pages as part of this Executive Summary.

Co-design during this phase has been one that maintains children's ideas: not reframing children's ideas into the priorities of other people. It is about being led by the children's priorities.

This action plan did not undertake to review potential sources of funding however certain potential sources were identified and are noted.

A key gap also identified is how the area around Ysgol Pen Rhos / Seaside, which is a fairly small area, tends to fall between areas of larger strategic plans and this is demonstrated in this report. As a result development of this area with historic and current industrial uses has been piecemeal and reactive rather than planned and proactive. A recommendation is made for co-design of a neighbourhood plan to provide a planned framework for children's ideas to be put into action.

conclusion and forward actions

The recommended forward actions from this plan are:

- **Co-design and co-production approaches:** to be integral to any future work.
- **Evidence-based actions that can happen now!** 13 evidence-based ideas for short term implementation have been presented. These can be developed and delivered with children.
- **Create a co-designed neighbourhood plan:** strategies for the area around Ysgol Pen Rhos and Seaside deal at larger scales and have a tendency to overlook this immediate area. This could also be part of a Place Plan. A small task to start this could be a school route review by children with support.
- **Future research and analysis:** of data collected during this project in Phases I and II. Opportunities to develop this should be sought.
- **Ownership of the plan with capacity:** this should be considered by the project partners to identify the capacity, required resources, and support needed to make this happen.

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Evidence based actions that can happen now!	<ul style="list-style-type: none"> • more wildlife in the local area • more trees in parks • removing fences from trees once the trees are larger • more wildlife habitats 	<ul style="list-style-type: none"> • play equipment that are fun for disabled children • more bins in the parks • rubbish management in parks • dog waste management in parks 	<ul style="list-style-type: none"> • allotments and gardens in the school grounds and local area for growing foods/flowers • hopscotch in school grounds • improving the firepit area in the school grounds with more green • making classroom greener & more wildlife and biodiversity in the school grounds (OMIT car park; ADD wildlife sanctuary specifically) 	<ul style="list-style-type: none"> • making paths accessible for disabled people

introduction

about this document

This document is a report that summarises the objectives undertaken as part of the third phase of work during the Making Space for Nature project, those being:

Phase 1: Let's talk about nature: conversations between children and parents or caregivers as they explore natural and built environments locally.

Phase 2: Making space for nature: co-design activities where children explore how they have experienced nature in the past and how they want to experience nature in the future in their local area. This phase includes staff engagement also.

Phase 3: Actions for nature (this document): preliminary action plans linking children's priorities to wider context / policy / opportunities. Including an open community & stakeholder event on the theme "My environment, my future".

project setting

Ysgol Pen Rhos is a primary school in Llanelli, Wales. There are many notable features about the school and it's context including that:

- It is a new school formed from the merger of two schools originally created in the 19th century: Copperworks Infant School and Lakefield Primary School.
- It is in a new building completed in 2018.
- It is a dual-stream Welsh and English medium school.
- There are a significant proportion of children with additional learning needs.
- The school takes a trauma informed approach, with staff trained to a high level in such an approach and this has had positive effect in supporting children.
- The school is itself actively involved in a number of research projects including with Cardiff University for example this Making Space for Nature project, and the PharmaBees project.
- The community and neighbourhood around the school has many natural and social assets including wetlands of international importance. There are important heritage assets in the community too.
- At the same time children face significant challenges with many up to 50% of children living in poverty in surrounding

areas and these experiences influence children's health, learning, and well-being.

- There are environmental challenges too: the school is built in a formerly industrial area and adjacent uses include industrial uses. The neighbourhood has evolved reactively in a piecemeal way. Strategies for the wider area of Llanelli have failed to consider how the area around the school can become a healthy, liveable neighbourhood.

a healthy places approach

"Health is created and lived by people within the settings of their everyday life: where they learn, work, play and love."

World Health Organisation (1986)

The places where children live, learn, and play have a vital role in health creation. Much of what works for well-being in these places such as at the neighbourhood level is well known and yet often it doesn't translate into what happens on the ground.

The broad approach in this Making Space for Nature action plan is a public health approach. It is a wider determinants approach to health and wellbeing – that is to say a holistic one.

In Creating Healthier Places And Spaces For Our Present And Future Generations, Public Health Wales (2018) has recently highlighted how the neighbourhood environment can contribute to health and is aligned with the Well-being of Future Generations Act (National Assembly for Wales, 2015) goals and ways of working. Evidence informed approaches that Public Health Wales advise include:

- walking and cycling infrastructure
- green and blue infrastructure
- food growing and retail environment
- community, health and social care services from local facilities
- low levels of air pollution
- building design

From a child's perspective these might include different things to how adults think about these topics such as:

- Getting to and from school
- Play (in nature)
- Growing plants and healthy food
- Having friends in the wider community
- An absence of illness caused by air pollution
- Home and school environments



The impact of our neighbourhoods on health are more than just the direct environmental risks.

Such an approach is complementary to Welsh Government’s programme for government (Welsh Government, 2021) and strategies in Wales including The Parliamentary Review of Health & Social Care in Wales (Welsh Government, 2018b) and an aim to “improve population health and wellbeing through a focus on prevention” and Welsh Government’s subsequent policy, A Healthier Wales, with a vision of “a ‘wellness’ system, which aims to support and anticipate health needs, to prevent illness, and to reduce the impact of poor health” (Welsh Government, 2018a, p.4).

child health in Wales

A broad understanding of child health should consider:

- Listening to and involving children: not just consulting or engaging with children but allowing children to meaningfully exercise their rights including to good health and to be involved in decisions about health.
- Wider determinants: approach to health recognising the multi-layered and complex web of things that have an effect on health and wellbeing. The natural and built environment is one such determinant of child health.
- Lifecourse approach: recognising that events, illness, and experiences can have long term health impacts that may not manifest until later in life. For example, half of mental health problems start before the age of 14 (Royal College of Paediatrics and Child Health, 2020, p.23)
- Health equity: working for health equity requires recognition of the unequal distribution of good health among children and that, for example, that the rate of mortality (deaths) in Welsh children age 1-9 is 70% higher for children from the most deprived groups compared to the least deprived.
- Preventative approach: avoidable mortality, disease, and injury - many of those that do exist are largely avoidable with preventative approaches.

The State of Child Health 2020 set out that priorities for child health in Wales are:

- Reducing child health inequalities
- Prioritising public health, prevention, and early intervention
- Building and strengthening local, cross-sector services to reflect local need

(Royal College of Paediatrics and Child Health, 2020, p.5)

Covid-19 has emphasised the need for addressing these priorities.

Children themselves have identified many priorities for staying healthy, happy, and well including:

- Exercise & hobbies
- Food & drink
- Rights and safety
- Healthy living

Young children (age 1-9): mortality (deaths) in this age group were 70% higher for children in the most deprived groups compared to the least. RCPCH states that in Wales cancer remains a particular focus for this age group.

For adolescents (10-19) bridging across older primary school and high school pupils RCPCH argue that priorities for Wales include supportive environments for walking and cycling routes for children and young people to use and reducing school journeys by private motor vehicles.

Welsh Government's Healthy Weight, Healthy Wales strategy seeks to address childhood obesity and access to healthy food and supportive environments for being physically active are important in healthy weight.

Other important aspects for child health in Wales to note are that:

Mental health: is seen as a vitally important domain of child health, yet there is a lack of data on child mental health in Wales which limits understanding of this topic.

Family and social environment: are critical to creating positive child health. This is a topic that is a significant focus at Ysgol Pen Rhos.

Education and learning: themselves are vital wider determinants of health. In a very real sense school settings can be part of a health creation system.

action plan values & ethical considerations

The practice/se values that underpin this action plan are:

- Addressing population health
- Addressing planetary health
- Working to reduce inequalities
- Creating with the community / end users
- Evidence informed

An evaluation of these values is included in the [Appendix 10](#) both pre and post project.

ethics and data protection:

Ethical approval for the research elements of the project were managed by the relevant academic leads for Phase 1 and Phase 2 as governed by Cardiff University.

From a research perspective the main activities during Phase 1 and 2 were data collection during this project. It is hoped and planned that further analysis can be undertaken by Cardiff University subject to future funding and resource availability. Again, this is under the governance of Cardiff University.

The action plan development does not include research data but rather information gathered through a process of stakeholder engagement. Information received is largely in the public domain already.

Any personal data is treated in accordance with Urban Habitats privacy notice ([available here](#)) and in this report all stakeholders have been anonymised.

project aims and objectives

This action plan sits within the wider project aims and objectives. Making Space for Nature aimed to work with the community to co-produce plans for making space for nature in the existing community and in the future.

This had a specific focus around Ysgol Pen Rhos and the areas adjacent to one of several large-scale developments in the locality, Pentre Awel, which is a project led by Carmarthenshire County Council with a focus on creating health and wellbeing through a diverse range of facilities, services, and activities.

The project engaged with children, parents or caregivers, and teachers at Ysgol Pen Rhos in open-ended conversations about their communities and physical environments. Sought to provide creative co-design tasks to elicit design thinking around how communities connect with nature and with each other, and yield an action plan, which this document summarises, for making space for nature in communities.

The objectives of Making Space for Nature were:

Phase 1: engaging the community in open-ended conversations about their immediate surroundings, including both natural and built environments.

Phase 2: engaging the community in design thinking around how communities connect with nature and with each other.

Phase 3: co-produce recommendations about making space for nature in the existing community and in the future development at Pentre Awel.

Co-production:

Co-production and co-design are used interchangeably in this report. Co-production refers to a set of principles about how public services are developed and delivered as well as the practices in which those principles are embedded. According to the [Co-production Network for Wales](#), co-production is when people providing and receiving services work together to identify community needs and to develop solutions to those needs. Co-production involves building relationships and developing networks across people and groups that were not previously connected in order to enable people to change a situation.

Timescale: Making Space for Nature was developed throughout 2022 and completed in December 2022.

Phase 3 Actions for Nature:

This third part of the project comprised three discrete yet related parts.

Community event: My environment, My future:

Children shared their preliminary action plans for nature from previous phases with parents or caregivers, teachers, local residents, and developers, and planners at an open community event on the theme “My environment, my future”. This was on 22nd November 2022 and involved project partners and stakeholders in a conversation about the benefits of natural environments, barriers, and challenges to engaging with natural environments, and action plans for how the community can make space for nature in the future.

This activity was led by Ysgol Pen Rhos. A summary of the event is presented in the [Appendix 9](#).

Stakeholder workshop:

In parallel with the community event a workshop and engagement activities were undertaken on 22nd November 2022. These supported translation of the preliminary action plan into actionable guidance and ideas for wider stakeholders such as educators, elected members, officers of public bodies, professional designers, local authority, development partners, and others.

This activity was led by Urban Habitats. A summary of the workshop is presented in the [Appendix 9](#).

Report: Actions for nature:

This report (this document) documents the community event, in particular community engagement with and responses to children’s action plans for making space for nature. This summative report is aimed at all stakeholders, including pupils, teachers, and parents or caregivers, as well as planners and developers. It is hoped that this ensures that Making Space for Nature is both an opportunity for children to use their “outside voices” and a mechanism for their voices to be heard.

This activity was led by Urban Habitats.

phase 1 summary | let's talk about nature

This section provides an overview of Let's Talk About Nature. A separate detailed report of this phase is also available.

Let's talk about nature involved researchers from the School of Psychology at Cardiff University recording conversations between 29 children and a parent or caregiver as they explored Seaside / Crown Park, a familiar natural environment adjacent to Ysgol Pen Rhos.

Families were asked to go on a treasure hunt. They were told that the researchers wanted to see the environment through their eyes.

These conversations provided naturalistic, open-ended evidence about how children and adults see nature in their local community and their thoughts and feelings about how their community connects with nature.

What is nature?

Many children and parents or caregivers named various aspects of nature that they saw, heard, or felt as they explored the park.

The most frequent were feathers, flowers, leaves, trees, sticks, grass, berries, pinecones, and butterflies.

What they did not name is equally important to note: most naming was at the basic category level, such as flowers and leaves, rather than naming specific types.

Nature is a space of imagination

Many children and parents or caregivers talked about aspects of nature that they did not observe but were reminded of, including birds, roots, seeds, rabbits, worms, moles.

"There was a bunch of crows walking on the donut like they were the little class that plays on there... like they were reception class that plays on the hill."

Nature is a space for curiosity: Children asked many questions about their surroundings.

"What are these leaves called?"

"Why is there loads of holes in the grass?"

"Why is that cloud colliding with that cloud?"

Connecting with nature

Children and parents or caregivers expressed their appreciation for nature and talked about different things that people can do to help nature.

Parent: "What other type of things would you like to pick up that will make you happy?"

Child: "Leaves."

Child: "A stick makes me happy"

Child: "How beautiful"

Child: "They have a life like us"

What is needed?

Children and parents talked about the need to improve the area.

"People should throw it in the bin"

"We've got to make sure we don't stand in poo"

"Who put poo there?"

About a leaf: "Can we keep him in our house, and grow him?"

Conclusion

These are preliminary reflections on the project by the research team. This programme was mainly focussed on recording conversations with children and their parent or caregivers. Children and parents valued participating in these activities during the project and it is intended that the conversations can be analysed further subject to resources and funding to do so.

What is interesting for the action plan is

Crown Park was explored here as a natural environment. The park is a large open area with a variety of uses. In planning terms, the area is subdivided into a series of discrete uses, some of which overlap: play park, open space, green space, sports pitch. In planning terms each of these uses is then related to specific policies that aim to advance a particular aim, such as open space provision. The park is not classed as a natural space from the perspective of planning. This is an example of how policy conceptualises space for nature differently than children do and if children are to be involved in the co-design of such space then this implies a rethinking or adjustment to their way of seeing / conceptualising nature.

The Carmarthenshire Nature Recovery Plan 2020-2030 notes the importance of spaces in between those that are protected sites and Crown Park is one such place:

Beyond our protected sites, other equally important habitats within the wider countryside contribute significantly to the resilience... of our natural environment. The conservation and enhancement of these habitats, as part of a national network of habitats, must be considered as integral to the future success of any plan for nature recovery in the county, and indeed any land management plan.

The park is not classed as a natural space from the perspective of planning. Current policy conceptualises space for nature differently than children do.

phase 2 summary | making space for nature | co-design with a class of year 6 pupils

This section provides an overview of co-design activities as part of Phase 2. A separate detailed report of this phase is also available.

This phase aimed to engage the school community in design thinking around how communities connect with nature, with each other, and then to co-produce recommendations about making space for nature in the existing community. We engaged Year 6 children in a series of four workshops using creative making tasks around themes such as:

- What is nature?
- What is community?
- How can we connect communities with nature?

The work was undertaken collaboratively with Urban Habitats and Learning through Landscapes. Dr Matluba Khan led this phase adapting previous methods from a recent project in Cardiff, Wales, and previous research projects in London and Bangladesh. Methods engaged children in activities including drawing, photo-walk, mapping, and model making. More information about these methods are available on Dr Khan's [profile page at Cardiff University](#).

Preliminary analysis of data collected over the course of four workshops reveal that children generally were very much open about their feelings and thoughts about nature and community. They articulated clearly what they preferred to have in their community to make more room for nature. Children stated that nature is very important to for health and that they considered nature as part of their community.

Analysis of children's maps and drawings of where they find nature in their communities show that children were aware of the boundaries and spaces within the school and beyond. Children find most nature in the forest and the Seaside (Crown) Park. They find less nature in neighbourhood streets, the brownfield area behind the school, and the recycling processing plant adjacent to the school.

Most children thought that the school grounds and the school building and classrooms should welcome more nature in too. Children spoke warmly about the opportunity to connect with nature in their community by growing vegetables and flowers, walking in the forest, building den, playing with conkers, enjoying

the vista and fresh air. By contrast they expressed negative feelings around 'rubbish', plastics, poor maintenance of public spaces, a lack of vegetation, unpleasant smells, noise from cars, and unsafe streets.

The ideas shared by children to improve surrounding spaces to make more space for nature can be grouped into four broad themes:

- Green/blue spaces: some examples are: different types of vegetation, flower gardens, woodlands and forests, greener streets, wild life corridor etc.
- Parks and playgrounds: age appropriate and disabled friendly play equipment, more benches, lights and bins, dog-park, etc.
- Mobility and safety: wider footpath, closing the streets in front of the school to cars, less traffic, appointing park monitors, accessible footpaths for the disabled
- Making space for nature in the school: making school ground greener with diverse vegetation, wildlife sanctuary instead of car park, more seating, hopscotch, greening the classrooms, etc.

Children also undertook a prioritisation exercise of which ideas they would like to see implemented in short, medium, and longer term.

Some of the ideas that children think are really important and should be implemented now are: allotments and gardens, greener and safe streets, making paths accessible for disabled people, play equipment for disabled children, hopscotch in school grounds, improving firepit area with more greens, more bins in the parks, making classroom greener, wildlife and biodiversity, more seating near streets and in parks and playgrounds and removing the car park to have a wildlife sanctuary in the school.

Conclusion

The objective was to co-produce recommendations about making space for nature in the existing community and potentially within future developments including Pentre Awel. These are the preliminary co-designed findings. Next stages of development if this were taken further could include:

- Further analysis of co-designed data.

- Further co-design with children of specific ideas.
- Development of a neighbourhood level plan to provide a framework within which future development / interventions could occur.

What is interesting for the action plan is

For the action plan this phase of work provides:

- Evidence from children through a rigorous co-design process
- Evidence based actions that can happen now!
- Signposts for future actions both at an individual intervention level and also at the neighbourhood level.

The actions that can happen now have been taken as examples within this action plan that are then linked to: ongoing / planned projects and investments; policies and strategies in the area; organisations and groups that can support this work.

What is vital to note is that co-design does not stop here, what has been demonstrated is the approach to co-design undertaken rigorously that now needs to be applied in future to the planning and design of changes for nature in future. This is important to ensure children remain involved in decision taking and for the wider health benefits that can accrue from supporting agency and a sense of control in life as a wider determinant of health.

Figure: examples of children’s co-designed themes shared at stakeholder engagement for this activity plan.

Nature in my community	Play and parks	School grounds	Travel and safety
Green / blue spaces; biodiversity; nature for nature’s sake.	Parks and playgrounds; recreation and socialisation, e.g. activities children do and/or people they might meet.	School grounds; making space for nature in school grounds; play facilities in school grounds.	Mobility and safety; including mobility, access, risk, safety, cleanliness.
			

phase 2 summary | making space for nature | school staff sessions

This section provides an overview of co-design activities as part of Phase 2. A separate detailed report of this phase is also available. This part of phase 2, led by Learning Through Landscapes focused on engagement with staff. It was focussed on nature and community through three stages:

- Where are we now?
- Where do we want to be?
- How can we get there?

Staff enthusiastically contributed to a range of activities to gather their thoughts and ideas from annotating maps and images to brainstorming the experiences they wanted for their pupils in their school grounds and local outside spaces.

They highlighted the need for pupils' connection with nature as much as the importance of the nature itself and spoke about the wide range of community organisations and members that both support the school and area supported by the school.

Staff wanted to see children both learning and playing more outside – connecting with nature, getting messy and taking risks. Developing both skills and knowledge as well as their independence and understanding of the world around them. Three different aspects of being outside were highlighted by the staff:

- Play
- Teaching and learning
- Cooking and eating

The vision statements suggested by the staff all highlighted the need for the school grounds and local areas to be nature-rich:

'Our school grounds will be a safe place for both school and community where our children can build confidence and independence, learn, play and experience the natural world, developing knowledge and skills about the environment and how to care for it.'

More specifically the staff priorities were to:

- Provide children with more safe opportunities to have regular contact with nature both in the school grounds and wider local area

- Keep more animals in the school grounds, such as chickens and rabbits and to develop pupils' understanding of the natural world
- Take more lessons outside, with sheltered areas created in the school grounds to support this
- Enable children to take part in more imaginative and expressive play, to get messy and to take risks as they develop skills and independence
- Provide children with experiences outdoors that they cannot have inside such as growing and cooking their own crops

Conclusion

This activity sought to engage the school community through staff in thinking around how communities connect with nature and with each other. It demonstrated how engaged with the topic staff already are and this enthusiasm, knowledge, and skill can hopefully be linked with children's priorities in future.

What is interesting for the action plan is

Staff are already 'agents for nature' working to support nature and children in being in nature. This provides an excellent resource and skill base for future actions.

Staff health and wellbeing are also vital and actions for nature in school can benefit this group of people too across.

Reflecting across both parts of Phase 2 it is notable that sometimes adults and children do have quite different ideas about nature and what is immediately of greatest importance. Priority has been given in this work to the voice of children. The skills and knowledge adults have *are* needed to deliver ideas and interventions. So adult knowledge and thinking needs to be carefully fused in any action plan with children's priorities: a constant approach of reflective learning and awareness to children's voices needs to be maintained. The methods employed in Phase II provide an example of how to achieve this.

phase 3 | actions for nature

approach

Actions for nature were informed by the work across all phases of the project.

The approach continues to centre children's voices whilst making links across other areas in support of this. So, for example, considering the themes identified by the children answering the following questions:

- Who else (people / organisations / groups) is working on this already or has skills to do so?
- What policies or strategies do they have in place already that would support children's ideas?
- What specific projects or investments do they have happening already, small or large, that could support putting children's ideas into action?

A supplementary question and benefit that was not necessarily envisaged at the start was:

- How could the project Making Space for Nature help them to answer their own questions / improve the involvement of children / fill gaps of understanding in relation to children's priorities.

As an example of this one organisation was submitting a funding bid related to this topic during the preparation of this report and some of the policy links identified for biodiversity were able to be shared with them to help strengthen that application.

It is important to note that the development of an action plan sought to support children's ideas and link them to things like policies and projects developed by others. A process of co-design at this stage means one that maintains the children's ideas, specifically this means not reframing children's ideas into the priorities of other people and being led by the children's priorities. So the actions for nature are not about translating children's ideas into 'adult speak' or other organisational or policy language. Rather it is about bringing these valuable sources of support to bear on the children's ideas and priorities. The overall aim therefore is toward action and implementing children's ideas.

Whilst this may seem a simple point it is crucial and counter to how a lot of consultation is done currently, for example in the mainstream built and environmental sectors.

what we did

To inform the actions for nature the following were undertaken:

Who is already working in the area? Joining up the dots:

- Speaking with people doing good work already
- Understanding specific existing policies, strategies
- Understanding specific existing plans, projects, investments

Site visits:

- Wider area site visit – urban design review
- End of school street traffic – school journeys
- The Goods Shed - interest in outdoor biodiversity & play

Visiting case study examples:

- Community garden at Cynon Valley Organic Adventures
- Community solar & community gardens at Energy Gardens at Brondesbury
- School mobility and active travel improvements at Waltham Forest

neighbourhood observations and reflections

During site visits to the neighbourhood and from review of current and past strategies for the area around Ysgol Pen Rhos a number of observations were made.

The area around the school including Seaside appears to 'fall between' other strategies which – due to their nature tend to focus on big picture items. A strategy from 2014 shows how the area (prior to the school being built fell between four strategic priorities:

- Northern Zone: North Dock & Old Castle Works
- Southern Zone: Delta Lakes, Machynys, The Avenue
- Key transport links: at coast – road & active travel
- Key transport links: railway



Figure: extract of South Llanelli Supplementary Planning Guidance, 2014. School location indicated. The area around Ysgol Pen Rhos sometimes seems overlooked between other strategies.

This observation was confirmed as valid by a number of stakeholders.

The potential problem can be seen repeated in the current Local Development Plan proposals – which is not a critique of these as they are intended to respond to the strategic context. However the nature of placemaking and development control is such that this leaves the creation of healthy and high quality places for children and nature to be reactive and unplanned. It can be seen that areas immediately around Ysgol Pen Rhos are not within designated policy areas (colours indicate areas with policies attached). Even seemingly important investments such as the location of the proposed new Ysgol Heol Goffa is not included as a policy designation.

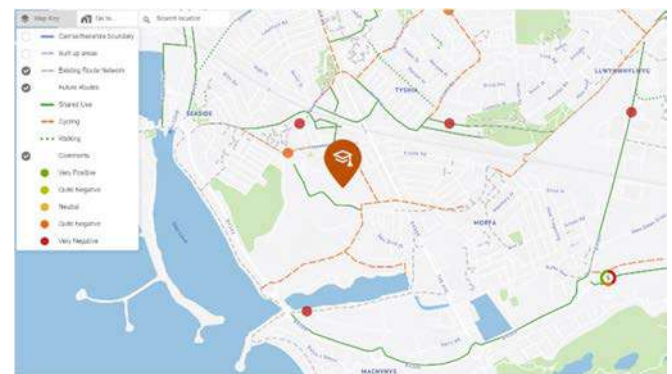


Extract of Local Development Plan Deposit Revised Proposals map 2018-2033. School location indicated.

The current active travel network map for Carmarthenshire has a number of proposals around the school which are detailed elsewhere in this report. These come closer to addressing certain problem areas around the school yet appear to have a principal

focus on joining up strategic routes. Whether these respond to the needs of children is not clear. A strategic route can be important at the scale of Llanelli but for a child walking to school it is likely that much more local destinations and routes are important. There is evidence from other places showing how transport network design tends to prioritise the journeys made by men, therefore it is important to consider to what extent proposals are inclusive and address both equality duties and socio-economic duties that public bodies have.

Mobility routes do however have the opportunity to join up destinations not just for children but also for nature – there is an obvious connection here. However opportunities need to be sought at an early stage to allow this to happen, such as by allowing space to integrate nature alongside active travel routes.



Extract from Carmarthenshire Active Travel Network Map. School location indicated. Dots = comments.

More generally in the area the evidence of an important industrial past is evident as well as remaining land uses.

Notable contrasts of adjacent land uses can be seen such as the location of Ysgol Pen Rhos immediately adjacent to an industrial site for metal recycling storage and transport.

Other observations from a planning and placemaking perspective are:

- Adjacencies of some land uses place potentially vulnerable population groups (school children) in close proximity to uses such as industrial scale holding of metals for recycling.
- There is an apparent separation of children's environment and the spaces children use from other facilities such as the Millennium Coastal Path / Park and facilities that appear to be more used by visitors and other people.
- Connectivity prioritises adult routes but not children's (and possibly families') routes.
- There are areas of existing value to children (from workshop observations).
- There are areas of great potential to children and wider objectives (nature / biodiversity).
- Heritage – both built environment & community / people's life stories & experiences.

- There is a breakdown of urban form and the sense of place deteriorates as you move out from the school, especially South and along The Avenue toward the B4304.
- Areas of landscape and planting appear to be maintained for attractiveness from the car window rather than utility for other important uses such as biodiversity and children. Up to three different landscape management approaches can be observed within a few metres in some areas.
- Existing landscape & nature: there are some outstanding spaces nearby, these are not very accessible for people and children particularly.

These observations reflect field notes and there would be value in considering a more detailed report on how the connectivity of the environment for people and nature.



Image: landscape appears presented to be attractive from the car window not prioritising children or biodiversity – up to 3 different landscape management approaches within a few metres in some areas.



Image: existing landscape & nature, nature habitats of international importance for biodiversity.



Image: spaces used by children and others are separate and past decisions around transport infrastructure appear to reinforce this separation of children from nature.

Limited observations were also made of school related traffic (see [Appendix 5](#)). A school route review could be a valuable exercise to be undertaken by children: for example using a tool such as published by Living Streets Cymru:

“A School Route Review can be an important step in improving the walking environment and so help get more families walking to and from school.

Gathering information from the people who know the area will provide the best picture of what it is like to walk the routes you are going to review.

You will discover what actually happens on the walk to and from school and what families think.”
(Living Streets Cymru, no date)



Image: example of pavement parking at end of school day on Copperworks Road.

stakeholder engagement

Engagement was undertaken with a wide range of potential stakeholders with the following contacted directly. Full details of stakeholders met with are included in [Appendix 1](#).

- ACCELERATE Partners
 - Cardiff University
 - School of Psychology
 - School of Geography & Planning
 - Urban Habitats
 - Learning Through Landscapes
 - Hywel Dda University Health Board
 - Cynon Valley Organic Adventures
 - Carmarthenshire County Council

- ACCELERATE collaborators
 - Ysgol Pen Rhos
 - Cardiff University, School of Pharmacy and Pharmaceutical Sciences

- Stakeholders
 - Carmarthenshire County Council
 - Pentre Awel Development
 - Economic Development
 - Housing
 - Highways and Transport Division, Environment Department
 - Forward Planning Section, Planning Division, Environment Department
 - Biodiversity
 - Homes and Safer Communities
 - Education & Children's Services Department
 - Education & Inclusion Services
 - Family Information Service, Childcare and Play Team
 - Hywel Dda University Health Board
 - Public Health
 - Healthy Schools
 - Llanelli Town Council
 - Bouygues (via Pentre Awel)
 - The Goods Shed

These engagements were held via online meetings with the following agenda:

Engagement / Information Gathering Agenda:

Our project is titled Making Space for Nature and is focused on the school site and streets around Ysgol Pen Rhos.

Does this relate to your work or priorities, if so how?

We want to avoid duplicating existing efforts. What could an 'action plan' for nature' contribute to this topic - is it even useful - if so how?

What specific opportunities might there be for an action plan to link to:

- Policy
- Funding / grants / bids
- Projects

As part of a wider school showcase on Tuesday 22nd November 4-6pm can we invite you or a colleague / representative to a workshop on the action plan from 5-6pm?

The following stakeholders were identified and invited to the school showcase event, they were not engaged with directly so their policies, projects, and comments would be a future action to add to this report:

- Wider stakeholders
 - CYCA
 - People Speak Up
 - Llanelli Community Partnership
 - Breaking Barriers Group
 - Llanelli Multicultural Network
 - Pentre Awel Development
 - Llanelli Town Council
 - Ysgol Pen Rhos, School Governors
 - Ysgol Pen Rhos, Eco Council
 - Ysgol Pen Rhos, School Council
 - Ysgol Pen Rhos, Staff
 - Ysgol Pen Rhos, Pupils, Parents or Caregivers, & Guardians (the wider school community)

The following groups or organisations were identified as potential future stakeholders although not contacted directly during this project:

- Carmarthenshire Youth & Children's Association
- Carmarthenshire Youth Service, Bwlch Rangers Morfa
- Bwlchgywynt community group / disbanded
- Seaside Community Association
- St Paul's Family Centre
- Llanelli Historical Society
- Antioch Church – food bank
- Threshold (Llanelli Women's aid)
- Morfa Residents Association
- Sea cadets – New Dock Hotel Embankment Road
- Seaside AFC Crown Park
- Safer Communities Action Group (SCAG)
- The Wallich
- Chooselife
- Chooselife Family Centre
- Morfa Family Centre
- Tyisha Foodbank

opportunities list

From Phase I and II themes were refined to reflect outputs from both of these:

- Green / blue spaces; biodiversity; nature for nature's sake.
- Parks and playgrounds; recreation and socialisation, e.g. activities children do and/or people they might meet.
- School grounds; making space for nature in school grounds; play facilities in school grounds.
- Mobility and safety; including mobility, access, risk, safety, cleanliness.

Data was extracted from the following sources:

- Engagement meeting notes
- Documents provided by stakeholders
- Documents sourced by desktop evidence gathering

These were extracted per organisation and tabulated as:

- Policies / Strategies
- Projects / Investments / Plans / Capacities / Resources

This data is provided in the Appendices and it is hoped will be a valuable source of information for future development of individual actions. As mentioned above information on biodiversity for example has already proven useful to a stakeholder funding bid.

The opportunities table runs to many pages so to provide an overview for this report and to clearly link these to co-designed themes the opportunities were then tabulated against these themes and also by:

- Organisations / groups: that appear to have the clearest and most direct link to a theme
- Policies / strategies: that support the theme or are relevant to the theme
- Projects / opportunities: that are happening both large strategic projects and smaller ones
- Other: any other points that arose
- Evidence based actions that can happen now!

It is of course the case that in most organisations could be listed under every heading however the intention here was to identify the major links. That is not to exclude any particular contribution or involvement under any theme.

The evidence based actions come from co-design sessions with children so are robust ideas developed through a rigorous co-design process. It is important that these ideas are understood in the context that they were produced so they should not simply be 'lifted' out of this context – it is important that co-design with children continues.

The table on following pages presents this mapping.

Theme	Nature in my community	Play and parks	School grounds	Travel and safety
Theme detail	Green / blue spaces; biodiversity; nature for nature's sake.	Parks and playgrounds; recreation and socialisation, e.g. activities children do and/or people they might meet.	School grounds; making space for nature in school grounds; play facilities in school grounds.	Mobility and safety; including mobility, access, risk, safety, cleanliness.
Organisations / groups	Making Space for Nature partners Ysgol Pen Rhos – wider school community Ysgol Pen Rhos – Eco / School Council Hywel Dda University Health Board CCC – Pentre Awel CCC – Economic Development CCC – Housing CCC – Forward Planning CCC – Biodiversity Many groups focussed on species (moth, fungi, red squirrels, etc.) Llanelli Town Council Many wider community groups National Botanic Garden of Wales The Goods Shed Public Services Board	Making Space for Nature partners Ysgol Pen Rhos – wider school community Ysgol Pen Rhos – Eco / School Council CCC – Pentre Awel CCC – Forward Planning CCC – Biodiversity Llanelli Town Council Many wider community groups National Botanic Garden of Wales The Goods Shed Public Services Board	Making Space for Nature partners Ysgol Pen Rhos – wider school community Ysgol Pen Rhos – Eco / School Council Cardiff University – PharmaBees CCC – Biodiversity Many groups focussed on species (moth, fungi, red squirrels, etc.) CCC – Air Quality & Environmental Health CCC – Healthy Schools CCC – School Improvement CCC / Keep Wales Tidy: Eco Schools	Making Space for Nature partners Ysgol Pen Rhos – wider school community Ysgol Pen Rhos – Eco / School Council CCC – Highways + Active Travel CCC – Pentre Awel CCC – Forward Planning CCC – Biodiversity CCC – Air Quality & Environmental Health Llanelli Town Council Many wider community groups Public Services Board
Policies / strategies	Public Services Board: Wellbeing Assessment & Plan CCC – Biodiversity: Nature Recovery Plan & Wales Policies Hywel Dda UHB: A Healthier Mid and West Wales, Our Future Generations Living Well. CCC – Forward Planning: new Local Development Plan; future Health & Wellbeing Guidance. Llanelli Town Council: Biodiversity and Environmental Development Action Plan	Public Services Board: Wellbeing Assessment & Plan CCC – Biodiversity: Nature Recovery Plan & Wales Policies Hywel Dda UHB: A Healthier Mid and West Wales, Our Future Generations Living Well. CCC – Forward Planning: new Local Development Plan; future Health & Wellbeing Guidance. Llanelli Town Council: Biodiversity and Environmental Development Action Plan	CCC – Healthy Schools: whole schools approach. CCC – Biodiversity: Nature Recovery Plan & Wales Policies CCC – School Improvement: Curriculum for Wales; staff professional practice & development CCC / Keep Wales Tidy: Eco Schools	Public Services Board: Wellbeing Assessment & Plan CCC – Biodiversity: Nature Recovery Plan & Wales Policies Hywel Dda UHB: A Healthier Mid and West Wales, Our Future Generations Living Well. CCC – Highways: Active Travel policies; Highways Guidance; Wales Transport Strategy; Planning Policy Wales; EV charging. CCC – Forward Planning: new Local Development Plan; future Health & Wellbeing Guidance; Health Impact Assessment req'ts

Theme	Nature in my community	Play and parks	School grounds	Travel and safety
Projects / opportunities	<p>Transforming Tyisha Pentre Awel Hywel Dda Health Board: Green Health in Hywel Dda Planning: funding via s106 / Community Benefits. CCC – Economic Development: Llanelli Town Centre Recovery Masterplan Welsh Gov: It’s for them Campaign. Llanelli Town Council: ownership / management of parks; Connect projects – Learning into nature spring 2023. The Goods Shed: current phases; future phases; outdoor spaces.</p>	<p>Funding: from s106 / Community Benefits. Pentre Awel Llanelli Town Council: ownership / management of parks Llanelli Town Council: Learning into Nature, Spring 2023 The Goods Shed: current phases; future phases; outdoor spaces.</p>	<p>Llanelli Town Council: Learning into Nature, Spring 2023 Cardiff Uni – PharmaBees: link with green space, bio surveys</p>	<p>Transforming Tyisha Pentre Awel Planning: funding via highways agreements / requirements. CCC – Economic Development: Llanelli Town Centre Recovery Masterplan CCC - Active Travel: projects & maps generally CCC - Active Travel: schemes directly around school Welsh Gov: It’s for them Campaign CCC – Air Quality: school talks & potential citizen science monitoring</p>
Other	<p>Identified gap: neighbourhood / community plan for the area</p>	<p>Identified gap: neighbourhood / community plan for the area</p>		<p>Identified gap: neighbourhood / community plan for the area</p> <p>Challenge / opportunity: connectivity between The Goods Shed and surrounding areas including Ysgol Pen Rhos.</p>
Evidence based actions that can happen now!	<ul style="list-style-type: none"> • more wildlife in the local area • more trees in parks • removing fences from trees once the trees are larger • more wildlife habitats 	<ul style="list-style-type: none"> • play equipment that are fun for disabled children • more bins in the parks • rubbish management in parks • dog waste management in parks 	<ul style="list-style-type: none"> • allotments and gardens in the school grounds and local area for growing foods/flowers • hopscotch in school grounds • improving the firepit area in the school grounds with more green • making classroom greener & more wildlife and biodiversity in the school grounds (OMIT car park; ADD wildlife sanctuary specifically) 	<ul style="list-style-type: none"> • making paths accessible for disabled people

funding

It is important for any idea, business case, or investible proposition to be based on a clear and robust concept. Identifying and successfully securing funding is a crucial part of implementing ideas however, in Urban Habitats view, a strong case is the most important first element. Similarly, simply designing interventions to suit available funding in our experience rarely leads to successful projects or the most efficient way to deliver on the desired outcomes.

Funding should also be viewed in the round considering the whole neighbourhood / area and how all projects and investments are working toward a goal of making space for nature, seeking to leverage activities already happening to maximise the benefit for nature and delivering children's priorities.

Whilst this action plan is not a funding review for specific ideas, some potential sources of funding were identified.

Llanelli Town Council: has a role both in managing funds including some grant funding & bidding for funding. The Council takes a proactive approach and works in partnership with many groups.

Major projects (including Pentre Awel; Transforming Tyisha): these are material investments in the local area and there are both formal / statutory funding links as well as strategic / shared goals. These include, but are not limited to:

- Creating strategic shared goals for nature creation: through engagement with relevant leads / stakeholders, particularly at Carmarthenshire County Council.
- Formal routes include:
 - Community benefits through procurement
 - Planning agreements through 'Section 106' agreements: controlled by County Council, Town Council advocates for how these are invested locally.
 - Highways agreements through planning: likely to be oriented to mobility improvements in the local area
- Other sources of funding: are not identified here but include for example lottery funding and different lottery funds are investing in Llanelli already such as at The Goods Shed and through the Town Council – so for example these local organisations have a track record with these funders.

neighbourhood co-design | implementing ideas strategically

A clear gap identified in this phase is the relatively disconnected nature of the area around Ysgol Pen Rhos and Seaside. A recommendation for future that would seek to address this in a co-designed and strategic manner would be the development of a neighbourhood or community scale plan for the area.

Specifically, this could include:

- Co-design of a neighbourhood plan with children.
- A strategy adopted as planning guidance for the area such as part of a Place Plan.
- Place Plans can be adopted as Supplementary Planning Guidance (SPG) to inform future development.

This is an approach that partners in the project have experience in delivering elsewhere: for example it is a method developed by Dr Khan in other settings including Grangetown in Cardiff through the co-production of a neighbourhood plan to inform a community scale strategy and Urban Habitats has experience of advising on Place Plans and spatial strategies.

Such a plan could be linked to future planned SPG on Health and Wellbeing for the whole of Carmarthenshire.

conclusion and forward actions

This action plan is the third part of the Making Space for Nature project.

The action plan – actions for nature – brings together a series of robust and evidence informed ideas for interventions that could be made. These ideas have been developed through a co-design process with children from Ysgol Pen Rhos.

The recommended forward actions from this plan are:

- **Co-design and co-production approaches:** any forward actions should continue an approach of co-design with children. Consideration should be given to wider engagement across the school community and with other children in the neighbourhood.
- **Immediate ideas for implementation:** 13 evidence-based ideas that can happen now have been presented. These can be developed and delivered with children. Delivering on these initial ideas should help to build trust and confidence with children and the wider community that they do have agency in such initiatives. This should include children in hands-on creation of the ideas – with appropriate resource and support.
- **Create a co-designed neighbourhood plan:** strategies for the area around Ysgol Pen Rhos and Seaside deal at larger scales and have a tendency to overlook this immediate area. This results in a reactive approach to development that doesn't make the most of the opportunities. A neighbourhood plan which could also be part of a Place Plan is one way to address this to provide a framework for delivering ideas and interventions in a proactive, planned, and strategic way at the neighbourhood scale. A small task to start this could be a school route review by children with support and using tools such as those published by Living Streets Cymru.
- **Future research and analysis:** the data collected during this project in Phases I and II have significant potential for further analysis which could yield further insights and actions. Opportunities to develop this should be sought.

- **Ownership of the plan with capacity:** there are many plans in place locally for a diverse range of projects. Many organisations are very busy delivering these and themselves need more capacity to do so. There is a risk that this plan, whilst supported by many stakeholders, simply doesn't have one organisation or group to champion it and that those who may want to don't have capacity or resources to. This should be considered, in the first instance by the project partners to identify the capacity, required resources, and support needed to make this happen.

Within all of these co-design means maintaining children's ideas: not reframing children's ideas into the priorities of other people or organisations. It is about being led by the children's priorities.

A substantial amount of this report comprises appendices which are a resource for future use and can help to inform or support future development of the above actions.

Urban Habitats thanks the project partners and collaborators for their support; the stakeholders for their generosity with their time to share existing work; the dedicated and hugely enthusiastic staff of Ysgol Pen Rhos; and the real experts in making space for nature – the hugely knowledgeable children of Ysgol Pen Rhos who are an inspiration to make it happen!

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appendices

appendix 1 | stakeholder engagement list

appendix 2 | opportunities tabulation

appendix 3 | special biodiversity sites in Glanymor ward

appendix 4 | neighbourhood observations

appendix 5 | school street observations – end of day

appendix 6 | extract of Local Development Plan Deposit Revised Proposals map 2018-2033

appendix 7 | extract of South Llanelli Supplementary Planning Guidance, 2014

appendix 8 | extract from Carmarthenshire Active Travel Network Map

appendix 9 | stakeholder workshop & showcase

appendix 10 | delivering on action plan values

appendix 11 | economic & business benefits from Accelerate delivered to Urban Habitats

appendix 1 | stakeholder engagement list

Italics = exact title / details not confirmed

The anonymised table below presents the engagement undertaken as part of this project. As the work developed it was clear the engagement activity needed to extend as there are many active groups and organisations active in the area. All of these were also invited to the school showcase on 22/11/2022.

Organisation	Department	Job Title	Action Plan Engagement
ACCELERATE Partners			
Cardiff University	School of Psychology	Professor	Support throughout the project. Received 14/11/2022 Summary / findings Phase 1 (Dyad conversations)
Cardiff University	School of Geography & Planning	Lecturer in Urban Design	Support throughout the project. Received 14/11/2022 Summary / findings Phase 1 (Dyad conversations)
Urban Habitats	-	Director	Participated in all stages including attendance at all Phase 2A (children) and 2B (teacher) sessions.
Learning Through Landscapes	-	Head of Education and Communities	Support throughout the project. Email 24/10/2022 Received 09/11/2022 action plan input Phase 2B (Teacher Sessions)
Hywel Dda University Health Board	-	Sustainable Healthare Quality Improvement Programme	Project meetings, various. Meeting 31/10/2022 (postponed to 08/11/2022) Met 08/11/2022
Cynon Valley Organic Adventures	-	<i>Owner / manager</i>	Project meetings, various. Site visit 03/11/2022
Carmarthenshire County Council	??	<i>Link with Cardiff University</i>	Emails including 27/09/2022, 24/10/2022, 01/11/2022.
ACCELERATE collaborators			
Ysgol Pen Rhos	-	Head Teacher	Throughout the project. Email 24/10/2022
Ysgol Pen Rhos	-	Assistant Head Teacher	Throughout the project. Email 24/10/2022
Cardiff University	School of Pharmacy and Pharmaceutical Sciences	Professor of Microbiology	Various meetings & information sharing.

Organisation	Department	Job Title	Action Plan Engagement
Stakeholders			
Carmarthenshire County Council	<i>Pentre Awel</i>	Project Officer, Pentre Awel	29/09/2022, 25/10/2022, 02/12/2022
Carmarthenshire County Council	<i>Pentre Awel</i>	<i>Project Team, Pentre Awel</i>	Colleague responded on behalf.
Carmarthenshire County Council	Economic Development	<i>Economic development team</i>	25/10/2022
Carmarthenshire County Council	Economic Development	<i>Economic development team</i>	25/10/2022
Carmarthenshire County Council	<i>Housing</i>	<i>Housing team</i>	25/10/2022
Carmarthenshire County Council	<i>Housing</i>	<i>Housing team</i>	25/10/2022
Carmarthenshire County Council	Highways and Transport Division, Environment Department	Transport Strategy and Infrastructure Manager	Delegated to Thomas Evans
Carmarthenshire County Council	Highways and Transport Division, Environment Department	Transport Planner	07/10/2022
Carmarthenshire County Council	Forward Planning Section, Planning Division, Environment Department	Forward Planning Officer	Emailed 28/10/2022 Met 08/11/2022
Carmarthenshire County Council	<i>Biodiversity</i>	Biodiversity Officer	Met 10/11/2022
Carmarthenshire County Council		Rural Conservation Officer	Emailed 28/10/2022 not available till 22/11/2022
Carmarthenshire County Council	Homes and Safer Communities	Environmental Health Practitioner	Email & Phone call 02/11/2022
Llanelli Town Council	-	Community Development Officer	27/10/2022
Llanelli Town Council / Ysgol Pen Rhos	Glanymor Ward (Independent)	Councillor / school governor	Emailed 08/11/2022 Met 10/11/2022
Llanelli Town Council / Ysgol Pen Rhos	Glanymor Ward (Independent)	Councillor / school governor	Emailed 08/11/2022
Llanelli Town Council / Ysgol Pen Rhos	Glanymor Ward (Labour)	Councillor / school governor	Emailed 08/11/2022
Llanelli Town Council / Ysgol Pen Rhos	Tyisha Ward (Plaid Cymru)	Councillor / school governor	Emailed 08/11/2022
Bouygues	South West & Wales	Social Value Advisor	On leave till 14/11/2022
The Goods Shed	-	Community Engagement Trustee and Vice-Chair	Emailed 28/10/2022 Met 07/11/2022 Site Visit 22/11/2022

The Goods Shed	-	Coordinator	
Hywel Dda University Health Board	<i>Public Health</i>	<i>Public Health</i>	Emailed 28/10/2022 Meeting 28/11/2022
Hywel Dda University Health Board	Public Health Team	Principal Public Health Practitioner	Emailed 01/11/2022. Met 15/11/2022
Hywel Dda University Health Board	Public Health Team	Senior Public Health Practitioner	Emailed 01/11/2022. Met 15/11/2022
Hywel Dda University Health Board	Public Health Team	Public Health Practitioner	Via BC. Met 15/11/2022
Hywel Dda University Health Board	<i>Planning</i>	Head of Planning	Emailed 01/11/2022
Hywel Dda University Health Board	<i>Healthy Schools</i>	<i>Healthy Schools Team</i>	Emailed 15/11/2022
Carmarthenshire County Council	Education & Children	Healthy Schools Officer	Emailed 15/11/2022 Met 17/11/2022
Carmarthenshire County Council	Education & Inclusion Services, Education & Children's Services Department	Associate Educational Support Adviser	Emailed 15/11/2022 Meeting 18/11/2022
Carmarthenshire County Council	Family Information Service, Childcare and Play Team	Early Years Integration and Play Officer	Emailed 17/11/2022
Carmarthenshire County Council	?	<i>Play and Childcare Development Assistant - Play Sufficiency Assessment Action Plan</i>	Copied on email 17/11/2022
Carmarthenshire County Council	?	<i>Play and Childcare Development Assistant - Play Sufficiency Assessment Action Plan</i>	Copied on email 17/11/2022
Carmarthenshire County Council	?	<i>Eco-schools coordinator</i>	Emailed 17/11/2022

Organisation	Department	Job Title	Action Plan Engagement
Wider stakeholders			
CYCA		CEO	Invited to showcase event
People Speak Up		<i>Owner / manager</i>	Invited to showcase event
Llanelli Community Partnership		<i>Group members</i>	Invited to showcase event via Town Council
Breaking Barriers Group		<i>Group members</i>	Invited to showcase event via Town Council


Llanelli Multicultural Network		<i>Group members</i>	Invited to showcase event via Town Council
Pentre Awel Development	<i>Pentre Awel Outdoor Spaces Group</i>	<i>Group Members</i>	Invited to showcase event via Pentre Awel Officer
Llanelli Town Council		<i>Ward Councillors</i>	Invited to showcase event via Town Council
Ysgol Pen Rhos		<i>School Governors</i>	Invited to showcase event via Ysgol Pen Rhos
Ysgol Pen Rhos		<i>Eco Council</i>	Invited to showcase event via Ysgol Pen Rhos
Ysgol Pen Rhos		<i>School Council</i>	Invited to showcase event via Ysgol Pen Rhos
Ysgol Pen Rhos		<i>Staff</i>	Invited to showcase event via Ysgol Pen Rhos
Ysgol Pen Rhos		<i>Pupils & parents / caregivers</i>	Invited to showcase event via Ysgol Pen Rhos (as applicable)

Future stakeholders to contact: the following additional stakeholders were identified for future engagement include (with thanks to Llanelli Town Council).

Organisation	Action Plan Engagement
Carmarthenshire Youth & Children's Association	Future potential stakeholder to contact.
Carmarthenshire Youth Service, Bwlch Rangers Morfa	Future potential stakeholder to contact.
Bwlchgywynt community group / disbanded	Future potential stakeholder to contact.
Seaside Community Association	Future potential stakeholder to contact.
St Paul's Family Centre	Future potential stakeholder to contact.
Llanelli Historical Society	Future potential stakeholder to contact.
Antioch Church – food bank	Future potential stakeholder to contact.
Threshold (Llanelli Women's aid)	Future potential stakeholder to contact.
Morfa Residents Association	Future potential stakeholder to contact.
Sea cadets – New Dock Hotel Embankment Road	Future potential stakeholder to contact.
Seaside AFC Crown Park	Future potential stakeholder to contact.
Safer Communities Action Group (SCAG)	Future potential stakeholder to contact.
The Wallich	Future potential stakeholder to contact.
Chooselife	Future potential stakeholder to contact.
Chooselife Family Centre	Future potential stakeholder to contact.
Morfa Family Centre	Future potential stakeholder to contact.
Tyisha Foodbank	Future potential stakeholder to contact.

appendix 2 | opportunities tabulation

These are opportunities for children, partners, and stakeholders who may be involved in taking this work forward in future.

Organisation	Department	Policies / Strategies	Projects / Investments / Plans
Accelerate Partners			
Cardiff University	School of Psychology		Opportunity for future partnership, collaboration, funding bids, and so on.
Cardiff University	School of Planning & Geography		Opportunity for future partnership, collaboration, funding bids, and so on.
Urban Habitats	-		Opportunity for future partnership, collaboration, funding bids, and so on.
Learning Through Landscapes	-		Opportunity for future partnership, collaboration, funding bids, and so on.
Hywel Dda University Health Board	-	<p>A Healthier Mid and West Wales, Our Future Generations Living Well, 2018:</p> <ul style="list-style-type: none"> A social model of health is to be developed which includes the environment, social and green prescribing.  <ul style="list-style-type: none"> A whole system approach to health and wellbeing including the natural environment: "This whole-system can include hospital services, community services, primary care (such as GP surgeries), social care, people's 	<p>Opportunity for future partnership, collaboration, funding bids, and so on.</p> <p>Potential opportunities:</p> <ul style="list-style-type: none"> A new hospital is proposed in this part of Carmarthenshire, is there potential to input to this? Health sites in the local area, potential to connect with. Food: consider starting a Big Bocs Bwyd project / approach. Biophilic design: nature within built environment design is a potential link to health and wellbeing.


Organisation	Department	Policies / Strategies	Projects / Investments / Plans
		<p>homes, education, employment, leisure, food and the environment.”</p> <p>Hywel Dda University Health Board Three Year Plan 2022-2025:</p> <ul style="list-style-type: none"> • Link: Strategic Objective 4 is The best health and wellbeing for our communities. Making Space for Nature links to this. • Within this objective Wellbeing Plans are to be developed based on the Wellbeing Assessment. However as identified elsewhere there were no responses from children to the assessment survey and it is unclear how children’s views are represented in this. • A social model of health and wellbeing are to be developed within the Health Board area. Making Space for Nature addresses such a model of health. • “...engaging with nature played a key role in maintaining people’s physical and mental health and overall wellbeing during the COVID 19 pandemic and associated lockdowns. The importance of green and blue spaces to people’s wellbeing has increasingly been recognised, but access to them is unequally distributed.... The University Health Board is also working with its three Public Services Boards and with the Regional Partnership (RPB) on a joint objective to co ordinate activity that promotes social and green solutions for health and wellbeing.” 	

Organisation	Department	Policies / Strategies	Projects / Investments / Plans
		<ul style="list-style-type: none"> • Issue: “22% of our population is children and young people, but nearly a third of them live in poverty” • Issue: “The demand for children’s mental health services has increased during the pandemic, with an estimated 1 in 6 children now having a probable mental disorder.” <p>Links: to work developing a framework for tackling the social determinants of health.</p> <p>Links: to Public Service Board aims and objectives, e.g. through Wellbeing Plan.</p> <p>Green Health in Hywel Dda: a general approach to health benefits from spending time in nature. Including a staff network.</p>	
Cynon Valley Organic Adventures	-		<p>Opportunity for future partnership, collaboration, funding bids, and so on.</p> <p>Expertise in:</p> <ul style="list-style-type: none"> • Outdoor learning including qualifications in this • Linking outdoor learning to Wales curriculum • Creation of a community garden as a resource for the community with benefits for <p>Different groups who can benefit:</p> <ul style="list-style-type: none"> • Staff – employment roles • Volunteers • Support groups: e.g. cancer support group • School groups of all ages • Home schooled children

Organisation	Department	Policies / Strategies	Projects / Investments / Plans
			<ul style="list-style-type: none"> Parents or caregivers (mainly mums) of home schooled children through social interaction and mutual support <p>Important to note:</p> <ul style="list-style-type: none"> Building trust with the community is vital and takes time. <p>Cardiff University / PharmaBees: is linked to Cardiff University initiatives.</p>
Carmarthenshire County Council	?		<p>Opportunity for future partnership, collaboration, funding bids, and so on. The County Council leads the Pentre Awel Project, Transforming Tyisha, and other major investments. It also controls the allocation of funding from a number of sources (e.g. s106/Planning Agreements) and makes funding bids for investment (e.g. Levelling Up funding).</p>
ACCELERATE collaborators			
Ysgol Pen Rhos	-		<p>Opportunity for future partnership, collaboration, funding bids, and so on.</p>
Cardiff University	School of Pharmacy and Pharmaceutical Sciences		<p>PharmaBees programme which links to:</p> <ul style="list-style-type: none"> Pentre Awel Town Council Ysgol Pen Rhos A number of other schools in Llanelli and Carmarthenshire, currently about 6 with recruitment ongoing <p>There are opportunities to:</p> <ul style="list-style-type: none"> Link schools to local green spaces Undertake co-production / co-design sessions with other schools

Organisation	Department	Policies / Strategies	Projects / Investments / Plans
			<ul style="list-style-type: none"> • Develop bio survey activities with Cardiff University looking at biodiversity of green spaces • Links with schools globally e.g. Agean / New Zealand around the topic of climate change

Organisation	Department	Policies / Strategies	Projects / Investments / Plans / Capacities / Resources
Stakeholders			
Carmarthenshire County Council	<i>Pentre Awel</i>		<p>Pentre Awel Development (all phases). A multi-faceted and major investment (around £200 million overall) led by Carmarthenshire County Council with an overall focus to address wider determinants of health and wellbeing. Success for Pentre Awel will involve delivering on four themes:</p> <p>Employment – at all levels</p> <p>Education, skills, training opportunities focused on health & care sectors</p> <p>Health economy – reduced acute healthcare demand</p> <p>Research excellence</p> <p>Pentre Awel Zone 1 development. A £40M investment incorporating:</p> <ul style="list-style-type: none"> • Education, skills, training • Health & wellbeing • Research • Life sciences business development & incubation • Leisure centre

Organisation	Department	Policies / Strategies	Projects / Investments / Plans / Capacities / Resources
			<p>Procurement strategy emphasised social value including community initiatives.</p> <p>Specific opportunities include:</p> <ul style="list-style-type: none"> • Creation of an active travel (cycling, walking, disabled access) link. • Pentre Awel Zone 1 Outdoor spaces group / proposals, early work is shown in diagram. <p style="text-align: center;">Outdoor Spaces</p>  <p>The diagram is a 2x2 grid with 'Ideas Board' in the center. The quadrants are:</p> <ul style="list-style-type: none"> Leisure & Recreation (Top Left, Orange): Active Walks, Outdoor green gym, Sailing, Exercise classes, Paddleboarding, Kayaking, Cycling, Green exercise, Amphitheatre, Triathlon, Wood surfing, High/Low Ropes. Environment & Health (Top Right, Green): Active Travel, Zero Waste, Walking meetings, e-bike Hire, Sensory Gardens, Horticulture, Bee Hives, Cycle Hire. Education / Developmental Initiatives (Bottom Left, Yellow): Nature Trails, Outdoor play, Outdoor education spaces, Bushcraft, Geocaching, Outdoor kitchens, Photography, Sensory play, Intergenerational activities, Arts / sculpture trail. Community Initiatives (Bottom Right, Blue): Community Gardens, Public art / graffiti work, Community engagement, Allotment, Community ownership, Baggies. <p>As a major development there are potential funding opportunities arising from:</p> <p>Community Benefits programmes, typically required in publicly funded procurement.</p> <p>Planning Agreements & Conditions: such as funding for community facilities / offsite works / onsite facilities.</p> <p>And the opportunity to potentially influence / secure benefits for: active travel and biodiversity benefits.</p> <p>As a publicly funded project early engagement with the lead (Carmarthenshire County Council) to achieve these benefits will be beneficial.</p>

Organisation	Department	Policies / Strategies	Projects / Investments / Plans / Capacities / Resources
Carmarthenshire County Council	Economic Development	Circular Economy approaches more broadly.	<p>Transforming Tyisha: a housing led regeneration of an adjacent ward north of the railway line. Specific opportunities include:</p> <ul style="list-style-type: none"> • Engagement activities with community / schools, for which funding bids are being made. <p>As a major development there are potential funding opportunities arising from:</p> <p>Community Benefits programmes, typically required in publicly funded procurement.</p> <p>Planning Agreements & Conditions: such as funding for community facilities / offsite works / onsite facilities.</p> <p><u>Llanelli Town Centre, Recovery Masterplan, October 2021.</u></p> <p>A key objective: “Using the towns natural ‘green & blue’ infrastructure to create a stronger sense of place and distinctiveness.”</p> <p>Walkable neighbourhoods: linking up neighbourhoods forms part of the plan with a view to, “re-purpose empty as well as derelict buildings, create greener more active open spaces and destinations that reflect the distinctive local character, attractions and facilities. This will help reconnect with ‘walkable neighbourhoods’ near to the centre and the wider hinterland including the regeneration projects, coastal communities...” (p.14)</p> <p>Pentre Awel: another major investment over several phases (see above).</p>

Organisation	Department	Policies / Strategies	Projects / Investments / Plans / Capacities / Resources
Carmarthenshire County Council	<i>Housing</i>		Transforming Tyisha (as above)
Carmarthenshire County Council	Highways and Transport Division, Environment Department	<p>Opportunity for Making Space for Nature work to be a useful evidence base for future interventions.</p> <p>Policies:</p> <p>Highways Design Guide, 2018: this guide reiterates the hierarchy of transport modes. It should be applied to new developments and with the changes around Ysgol Pen Rhos it would be informative to assess whether the existing neighbourhood movement networks successfully support this hierarchy as from evidence collected during Making Space for Nature they do not.</p> <p>It should be noted that The Wales Transport Strategy, 2021 and Planning Policy Wales, Edition 11, 2021 place additional emphasis on prioritising walking, wheeling, cycling and equity for people who are disabled by current transport systems and networks.</p> <p>EV charging</p> <p>Electric Vehicle Charging Infrastructure Strategy, 2022: notes that “EV charging should be installed at locations that complement other modes of sustainable transport, including the use of public transport, walking, and cycling.”</p> <p>Joint Transport Plan for South West Wales, 2015-2020: a number of relevant points including:</p>	<p>Active Travel Comments map: unique within Wales to Carmarthenshire, a map that is open for comments to be added to on topics of walking, cycling, disabled access. Comments can be added online and will be considered more broadly in future. Feedback from schools and wider community is important to future developments. There are very few current comments on the map around Ysgol Pen Rhos (checked 18/11/2022).</p> <p>Heol Goffa school development: will include active travel proposals around this.</p> <p>Specific proposed projects:</p> <ul style="list-style-type: none"> • Replacement active travel bridge over railway: near Trinity Road as part of the Llanelli Spinal Route linking to Trostre Park. Part of, Scheme 42/L30 Llanelli, Cycling, ERM Pedestrian route 42 , INM cycling route including proposed crossing upgrade over existing bridge. • Scheme LN22 Llanelli (South of Ysgol Pen Rhos along boundary with recycling / waste processing facility). Shared Use. Aspirational route to rear of Ysgol Pen Rhos linking to Llanelli Spinal Route. • Scheme L24 Llanelli (Between Ysgol Pen Rhos and proposed Ysgol Heol Goffa). Cycling. Cycling infrastructure improvements linking to new school and Wellness Village. • Scheme L25 Llanelli (from Dolau Road east/west across toward Pentre Awel). Cycling. Cycling infrastructure improvements

Organisation	Department	Policies / Strategies	Projects / Investments / Plans / Capacities / Resources
		<ul style="list-style-type: none"> Active Travel (walking, cycling including for people with disabilities) are prioritised. “...there is a move away from small community schools towards larger combined catchment schools where more specialisation and expertise is available. This means pupils having to travel further and will impact on the proportion of pupils walking/cycling to school and the provision of free school transport” <p>Integrated Network Maps are prepared and updated under the Active Travel (Wales) Act 2013. An extract of the latest version around Ysgol Pen Rhos is included in Appendix 8.</p> <p>What’s helpful and needed to inform future planning: feedback on routes to school, including:</p> <ul style="list-style-type: none"> What issues do children / the school have What areas do they find dangerous 	<ul style="list-style-type: none"> - potential to move off road and link to new school and Wellness village. Scheme LN7 Llanelli (Copperworks Road). Cycling. Enhancement of on road cycle provision. Scheme L21 Llanelli (from Copperworks Road to railway station). Shared Use. Llanelli Station links provision of shared use path. Other schemes in wider area are marked on the online map (NB: this is post-consultation and not yet finalised). <p>Joint Transport Plan for South West Wales, 2015-2020:</p> <ul style="list-style-type: none"> Llanelli Integrated Transport Interchange. With this area being a “key focal point for transport interchange between a number of modes”. (status unknown)
Carmarthenshire County Council	Forward Planning Section, Planning Division, Environment Department	<p>Local Development Plan: due to be deposited January 2023. Deposit plan available online.</p> <p>There are extensive and detailed policy links within the Revised Deposit LDP (dated 2020), some of which are extracted here:</p> <ul style="list-style-type: none"> “NE2: Biodiversity: proposals for development should seek to maintain and enhance biodiversity.” “NE3: Corridors, Networks and Features of Distinctiveness: development proposals will be expected to maintain and enhance 	<p>LDP: Housing site for Gypsy and Traveller people and families. Which will be linked fairly directly with the new active travel Spine Route. Potential opportunities for reducing health inequalities and supporting this population group.</p>

Organisation	Department	Policies / Strategies	Projects / Investments / Plans / Capacities / Resources
		<p>ecological corridors, networks and features of distinctiveness.”</p> <ul style="list-style-type: none"> • “BHE2: Landscape Character: Development proposals should relate to the specific landscape and visual characteristics of the local area, ensuring that the overall integrity of landscape character is maintained” • “CCH6: Climate Change – Forest, Woodland and Tree Planting: support will be given to proposals for the creation and protection of new woodland, forests, tree belts and corridors where they seek to promote delivery of the national and local climate change and decarbonisation ambitions. ... There are opportunities to create links to green infrastructure, incorporate active travel facilities and enhance tourism and leisure opportunities, as well as promoting enhanced biodiversity, connectivity and ecosystems resilience. ... Trees, forest and woodland provides a range of ecosystem services, such as improving air quality, providing a cooling effect and shade in summer, reducing noise, carbon sequestration and increasing resilience to climate change trees, forests and woodlands also offer aesthetic and amenity value, and can act as landmark features within our settlements and open countryside...” • “SP 13: Maintaining and Enhancing the Natural Environment... proposals must reflect the role an ecologically connected environment has in protecting and enhancing biodiversity, defining the landscape, contribute to Well-being and the principles of 	

Organisation	Department	Policies / Strategies	Projects / Investments / Plans / Capacities / Resources
		<p>the Sustainable Management of Natural Resources.”</p> <ul style="list-style-type: none"> • “INF2: Healthy Communities: proposals for development which provide for active travel, accessible useable green spaces and infrastructure, and which seek to reduce health inequalities through encouraging healthy lifestyles, addressing the social determinants of health and providing accessible health care facilities will be supported.” <p>Opportunity to input to future Supplementary Planning Guidance on Health and Wellbeing (circa mid 2025).</p> <p>Health Impact Assessment – Population Groups: HIA is a requirement within policy for certain developments. There is an opportunity to inform the undertaking of future HIAs by developing local knowledge on population groups including those who experience the negative effects of inequalities. Ysgol Pen Rhos and other partners could play a role in developing this.</p> <p>Potential action: neighbourhood planning: forward planning and strategic planning are at a larger scale than the neighbourhood. The LDP does not address the neighbourhood scale around Ysgol Pen Rhos. A South Llanelli Supplementary Planning Guidance, 2014 document is now dated and even this ‘misses’ the area around the school as it is between ‘zones’ of Northern Zone (North Dock, Old Castle Works); Southern Zone (Delta Lakes, Machynys & The Avenue); Strategic Transport Link (Coast); and Strategic Rail Corridor (railway line). An action could be to develop a neighbourhood plan or development</p>	

Organisation	Department	Policies / Strategies	Projects / Investments / Plans / Capacities / Resources
		<p>brief for this area that focusses on the zone around Ysgol Pen Rhos and the emerging cluster of education, wellbeing, skills, and research facilities. Such a plan could be instrumental in operationalising a plan of Making Space for Nature in a planned and strategic way.</p>	
Carmarthenshire County Council	<i>Biodiversity</i>	<p>Carmarthenshire Nature Recovery Plan 2020-2030: is one of the clearest links to Making Space for Nature which can contribute across the plan objectives which are:</p> <ol style="list-style-type: none"> 1. Engage and support participation and understanding to embed biodiversity throughout decision making at all levels 2. Safeguard species and habitats of principal importance and improve their management 3. Increase the resilience of our natural environment by restoring degraded habitats and habitat creation 4. Tackle key pressures on species and habitats 5. Improve our evidence, understanding, and monitoring 6. Put in place a framework of governance and support for delivery <ul style="list-style-type: none"> • The ‘bits between’ protected sites vital: “Beyond our protected sites, other equally important habitats within the wider countryside contribute significantly to the resilience... of our natural environment. The conservation and enhancement of these habitats, as part of a national network of habitats, must be considered as integral to the future success of any plan for nature 	<p>Opportunity to use the school grounds, parks, streets, and wider neighbourhood to become a vital resource for nature, the Carmarthenshire Nature Recovery plan states:</p> <p>“A previous focus on protected sites has perhaps allowed significant losses of biodiversity outside the network of designated sites...”</p> <p>Opportunity: for partnership working, the Carmarthenshire Nature Partnership currently does not include certain key organisations including Network Rail and Welsh Water. With significant assets around Ysgol Pen Rhos there is an opportunity for these organisations to be encouraged to engage with Making Space for Nature.</p> <p>Resource: knowledge on creating biodiversity – for example just leaving spaces to grow rather than cutting them; what species should be planted; etc.</p> <p>Opportunity to inform nature action plans, the recovery plan contains objectives rather than actions and so what happens on the ground continues to be developed.</p> <p>Resource: there are a huge number of specialist groups in Carmarthenshire providing opportunities to link with the school and outdoor learning, including:</p> <ul style="list-style-type: none"> • Carmarthenshire Bird Club • West Wales Biodiversity Information Centre

Organisation	Department	Policies / Strategies	Projects / Investments / Plans / Capacities / Resources
		<p>recovery in the county, and indeed any land management plan.”</p> <ul style="list-style-type: none"> • There is a need for: "clear knowledge about what our priorities for species and habitat action are in Carmarthenshire, based on good-quality information, identified priority areas for action and their role in building resilient ecological networks at the landscape scale." p42 • Objective 3: get to the point where "there is adequate local information on where habitat connectivity would be most effective and what these connections could/should be – via priority mapping to inform potential restoration/creation opportunities." <p>Important to note: key framing for nature discussion:</p> <ul style="list-style-type: none"> • Nature is everywhere • Working with nature • Humans and nature in mutually supportive relationship • Community / child role in this. <p>Important links:</p> <p>Nature Recovery Action Plan 2015 (Welsh Government)</p> <ul style="list-style-type: none"> • Aims are: • putting nature at the heart of our decision-making, • increasing the resilience of our natural environment, • taking specific action for habitats and species. 	<ul style="list-style-type: none"> • Carmarthenshire Moth and Butterfly Group • Carmarthenshire Fungi Group • Llanelli Naturalists • Taclor Tywi • Mid Wales Red Squirrel Partnership • Butterfly Conservation - South Wales <p>Specific projects: linking with Town Council is a good approach.</p> <p>Resource: It's for Them Campaign. "Regularly cut, closely mown grass may look tidy - but it has little benefit for wildlife. Reducing mowing on road verges and amenity grasslands will allow grasses and wildflowers to grow. This creates a better habitat for 'Them': invertebrates, birds, small mammals, amphibians and reptiles."</p> <p>Issue / challenge: different management of space by different departments / people (e.g. across road verges, park space, etc.). Potential opportunity to have consistent practice that is overall more beneficial for biodiversity.</p>

Organisation	Department	Policies / Strategies	Projects / Investments / Plans / Capacities / Resources
		<p>The Action Plan for Pollinators in Wales, 2013 (Welsh Government)</p> <p>South West Area Statement, Natural Resources Wales: including themes of:</p> <ul style="list-style-type: none"> • Reducing health inequalities • Ensuring sustainable land management • Reversing the decline of, and enhancing, biodiversity • Cross-cutting theme: Mitigating and adapting to a changing climate <p>Carmarthenshire Public Service Board: e.g. Wellbeing Plan and Assessment.</p>	
Carmarthenshire County Council	Homes and Safer Communities	Links: there is much cross over between air quality and topics of: nature, green infrastructure, active travel.	<p>Air Quality Management Area (AQMA), Llanelli, 2016: Ysgol Pen Rhos is outside of this designated area however the issue of air quality is still important to consider around the school and can contribute to the wider Llanelli environment. There would be an interest to connect with the school on this topic.</p> <p>Potential opportunity for:</p> <p>Class talk / session in schools around air quality & pollution.</p> <p>Potential follow on activities around air quality monitoring.</p> <p>Potential opportunity to work with others to undertake a child-led / citizen science type monitoring project such as using Smart Citizen kits. NB: requires consideration of what is trying to be monitored.</p> <p>Action: specific concerns about smoke or other public health nuisances near Ysgol Pen Rhos can be raised</p>

Organisation	Department	Policies / Strategies	Projects / Investments / Plans / Capacities / Resources
			<p>with publicprotection@carmarthenshire.co.uk or tel: 01267-234-567.</p> <p>Note: permitted sites some permits are issued by Natural Resources Wales and some by Local Authority. There is also overlap such that Local Authority may investigate any concerns first even if permit issued by NRW.</p> <p>Important to note: consider language – in Making Space for Nature children talked about things other than Air Quality so would need to consider how the action is actually framed for children.</p>
Llanelli Town Council	-	<p>Making Space for Nature is very relevant and useful to Town Council to inform future actions.</p> <p>What's needed: what do Ysgol Pen Rhos want to achieve overall? Including in relation to major developments nearby.</p> <p>Important to note: data on Polish, Ukrainian (settlement programme), and Syrian (rehoused) communities. Published data will not necessarily highlight the presence of these groups but the Town Council knows they are there and works to support them. Often mainly women and children not men.</p> <p>Biodiversity Work plan Other plans</p>	<p>Resource: Town Council has community development resource including an officer which is unusual for a Town Council but has been the case in Llanelli for 20 years. This team is growing and the Town Council is growing, for example as a result of new development.</p> <p>Biodiversity and Environmental Development Action Plan 2021-2023:</p> <p>Community Development Work Plan 2022-2023:</p> <p>Connect 2022/2023 planned projects, including:</p> <ul style="list-style-type: none"> • Learning into Nature Spring (April-July 2022): herb boxes, food, and planting. <p>Crown Park: have actively invested and sought funding to improve this space including working directly with Ysgol Pen Rhos and others previously.</p> <p>Grant and other funding: Town Council actively manages various sources of funding and has the</p>

Organisation	Department	Policies / Strategies	Projects / Investments / Plans / Capacities / Resources
			<p>potential to make / join / support bids for other funding.</p> <p>Other specific projects...</p> <p>Planning: Town Council has a role in responding to planning applications.</p> <p>Cluster / Ten Towns initiative: opportunities for wider impact with the ten largest towns / Town Councils in Carmarthenshire.</p> <p>Other groups: the Town Council takes an approach of supporting a wide range of other groups in their work and prioritises partnership working including with:</p> <ul style="list-style-type: none"> • Llanelli Community Partnership • Breaking Barriers Group • Llanelli Multicultural Network • Ukrainian Support Group <p>Planning Agreements: such as Section 106 monies, the Town Council lobbies the County Council regarding priorities for investment of these.</p> <p>PharmaBee Project: Town Council is involved.</p> <p>Skills / resource: the National Botanical Gardens have visited the area to provide ideas and advice on planting and biodiversity.</p>
Elected Member, Llanelli Town Council; Carmarthenshire County Council; Ysgol Pen Rhos	Glanymor Ward	There is political support for the aims of Making Space for Nature.	<p>Opportunity: to address the perception issue of the environment around Station Road and Copperworks Road.</p> <p>Opportunity / important to think about: Pentre Awel is a massive opportunity, it has to be handled correctly</p>

Organisation	Department	Policies / Strategies	Projects / Investments / Plans / Capacities / Resources
		<p>Young people are the future so engaging with them and co-design approaches such as within Making Space for Nature are valuable.</p> <p>The Ward has historically experienced under investment and there is now an opportunity for transformation.</p> <p>Engagement with the community is important, it is important that the community also can see change on the ground, this will support residents coming on board with ideas and future changes.</p>	<p>including dialogue with the community at large. Affordability of the facilities is a key consideration and</p> <p>Opportunity / issue: air pollution, traffic levels, and traffic incidents are issues in the Ward, notably at New Dock Road.</p> <p>Opportunity: outdoor learning environments are important, with Covid-19 this has been increasingly recognised.</p>
Bouygues	South West & Wales		<p>Delivery partner / building contractor for Zone 1 of Pentre Awel. Potential links include through:</p> <p>Corporate Social Responsibility activities.</p> <p>Community Benefits activities arising from project commitments on Pentre Awel.</p>
The Goods Shed	-	<p>Ysgol Pen Rhos have existing links with The Goods Shed and have supported activities such as the creation of a schools booklet.</p>	<p>Development of The Goods Shed site over a number of phases. Phase 1 is complete and facilities available include: offices, community rooms, accessible facilities, kitchenette. Phases 2 and 3 are to follow.</p> <p>Development of outdoor spaces and creating space for natural space within a former industrial area. Based on enhancing what is there already and providing space for nature rather than 'renewing'. The Trust own this land and are keen to do 'softer' interventions like gardening, play equipment, and so on.</p>

Organisation	Department	Policies / Strategies	Projects / Investments / Plans / Capacities / Resources
			<p>Biodiversity walk: as part of above, interest to develop this for the wider community as limited access to outdoor space in Tyisha ward. To include making access safe whilst maximising what is there already and encouraging biodiversity. This may provide opportunities to consider sensory elements and inclusive play equipment.</p> <p>Opportunity: to link with existing group of active volunteers.</p> <p>Funding: currently applying to Big Lottery for additional staff resource to support coordinator.</p> <p>Challenge: a key challenge appears to be connectivity between this site and surrounding areas including Ysgol Pen Rhos. The railway crossing and adjacent road junctions are not easy to navigate and cross. For people with a wheelchair or pram this is difficult, bin collection days are particularly bad.</p> <p>Challenge: recognition of the need for inclusion of children's voices more widely in the area and potential for this to be done better.</p> <p>Links: National Botanic Gardens have attended the site to offer advice.</p>
Hywel Dda University Health Board	<i>Public Health</i>	<p>Place based approaches in Carmarthenshire are emerging and there are potential opportunities to contribute to this in future. This can mainly be seen through the Public Services Board (PSB) currently.</p> <p>See above for Hywel Dda corporate strategy, social model of care, green prescribing.</p>	<p>Resource: a data dashboard for early years children's health is in development and this is based on the Early Years framework, children:</p> <ul style="list-style-type: none"> • Are and feel safe • Are cared for, supported, valued • Are resilient, capable, coping • Are healthy • Learn and develop • Not disadvantaged by poverty

Organisation	Department	Policies / Strategies	Projects / Investments / Plans / Capacities / Resources
		<p>Green Health Network: is internal to health board and focussed on healthcare sites.</p> <p>Wellbeing Assessment: there is recognition of there being less engagement from children and young people in this despite significant engagement efforts.</p> <p>The assessment Consultation Report includes a response from the Office of the Future Generations Commissioner for Wales that, "It is reassuring to see your honest reflection on the 'voices which aren't currently being heard as part of the assessment' as an area for improvement, and your intent to increase efforts to engage with these groups." This feedback also notes under content that, ""there are clear links and connections between transport infrastructure, children's play, access to green space, physical activity and mental health, and reducing emissions" which the PSB should address in developing a Wellbeing Plan.</p> <p>Opportunities for wider impact / partnership working include:</p> <ul style="list-style-type: none"> • Cluster schools • Healthy Schools Network • PSB • Ten Towns Initiative (not covering Llanelli but relevant for wider sharing) 	<p>Link / resource: Coed Lleol, Small Woodlands Trust.</p> <p>Nature based activities for wellbeing in woods.</p>
Carmarthenshire County Council	Education & Children	<p>Healthy schools network:</p> <p>"The 'Healthy School' is one which takes responsibility for maintaining and promoting the health of all who 'learn, work, play and live' within it</p>	<p>Healthy Schools accreditation: Ysgol Pen Rhos already part of this. Opportunity to widen focus to wider determinants of health.</p>

Organisation	Department	Policies / Strategies	Projects / Investments / Plans / Capacities / Resources
		<p>not only by formally teaching pupils about how to lead healthy lives but by enabling pupils and staff to take control over aspects of the school environment which influence their health.”</p> <p>Pupil voice is central to a Healthy Schools approach. Something Making Space for Nature supports.</p> <p>Wider learning / impact:</p> <ul style="list-style-type: none"> • Modernising Schools Department: potential for learning to feed into future developments of new schools in Carmarthenshire. <p>Other examples: Old Road School, presented to network meeting</p> <ul style="list-style-type: none"> • Ysgol Bryn Teg, also doing work on its outdoor learning spaces 	<p>Whole school approach: future development of Healthy Schools will particularly focus on whole school approach, opportunity for school to work on this.</p> <p>Monitoring opportunity: there are a number of schemes including:</p> <p>School Health Research Network. School Environment Questionnaire, forms part of SHRN.</p> <p>Monitoring school travel: Hands Up Survey.</p> <p>Issue / important: schools receive many surveys, this needs considered when considering additional ones.</p> <p>Links: also links to:</p> <ul style="list-style-type: none"> • Eco-Schools approaches • Incredible Edible approaches
Carmarthenshire County Council	Education & Inclusion Services, Education & Children’s Services Department	<p>Curriculum for Wales: Making Space for Nature can be considered as contributing to the four purposes of the curriculum:</p> <ul style="list-style-type: none"> • “ambitious, capable learners, ready to learn throughout their lives • enterprising, creative contributors, ready to play a full part in life and work • ethical, informed citizens of Wales and the world • healthy, confident individuals, ready to lead fulfilling lives as valued members of society” 	<p>Staff resource available to support with School Improvement, specifically, sustainability, global citizenship, outdoor learning. Including: training, resources, materials, support (e.g. making funding bids).</p>

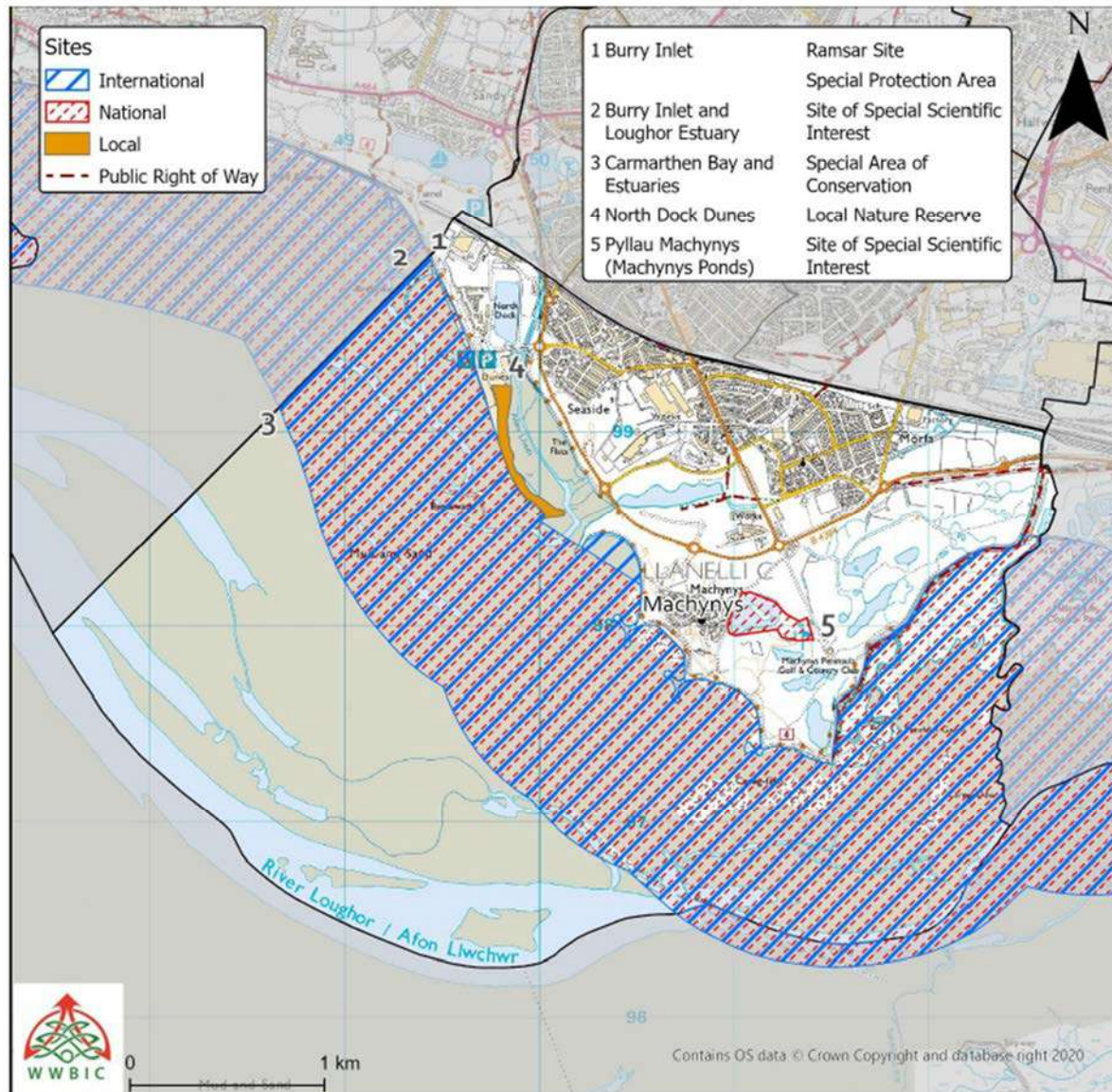
Organisation	Department	Policies / Strategies	Projects / Investments / Plans / Capacities / Resources
		<p>Code of Professional Conduct and Practice, 2022: links with duties to:</p> <ul style="list-style-type: none"> • “care for the safety, physical, social, moral, and educational wellbeing of learners and young people” • Collaborative working including with learners • Developing professional practice, for example, related to outdoor learning, and topics related to nature, climate change, wellbeing. <p>Opportunities for shared learning / sharing outcomes:</p> <ul style="list-style-type: none"> • Cluster schools • School Improvement Group 	
Carmarthenshire County Council	?		Eco-schools scheme: code and plan.

appendix 3 | special biodiversity sites in Glanymor ward

Source: Carmarthenshire County Council

<https://www.carmarthenshire.gov.wales/home/council-services/planning/biodiversity/wildlife-in-your-ward/#.Y3ek9HbP24Q>

Special sites in your area



appendix 5 | school street observations – end of day

A site visit was undertaken on 22nd October 2022 from about 14:45-15:15h. The visit aimed to observe the street context at the end of the school day including movements by pedestrians, cyclists, and vehicles.

Observations were made from three locations along Copperworks Road:

- Junction with Glanmor Road / Marine Street, roundabout at school car park
 - On Copperworks Road near properties 35/37
 - Junction with George Street
-
- Traffic counts were not undertaken however from the observer's perspective it seemed that traffic was lighter prior to school pickup time and that a significant amount of the movements by private cars around this time were related to the school run.
 - As school pickup times approached the school car park appeared to become full, this led to a number of drivers apparently driving into the car park, out of the car park, around the local streets, and then walking back to the school resulting in extra vehicle movements.
 - A number of cars were parked outside the school car park exit.
 - An adult driver and child were observed parking in the street, tapping into a Beat the Street sensor and driving away again. The reasons for this were not clear however it does raise the potential of such sensors creating an unintended consequence of people driving to a sensor designed to support being physically active.
 - Pavement parking by a number of cars was noted along Copperworks Road on the south side outside 35/37. Pavement parking restricts access for children walking and especially for anyone using a wheelchair or pushing a child buggy.
 - The design of the highway, especially at the round-about, appears to prioritise vehicle movements over children walking, for example the main walking route West from the school car park exit requires children to cross the road of the car park exit.
 - There is no obvious provision for cycling, no cyclists were observed.
 - Children with adults were observed walking and using scooters.

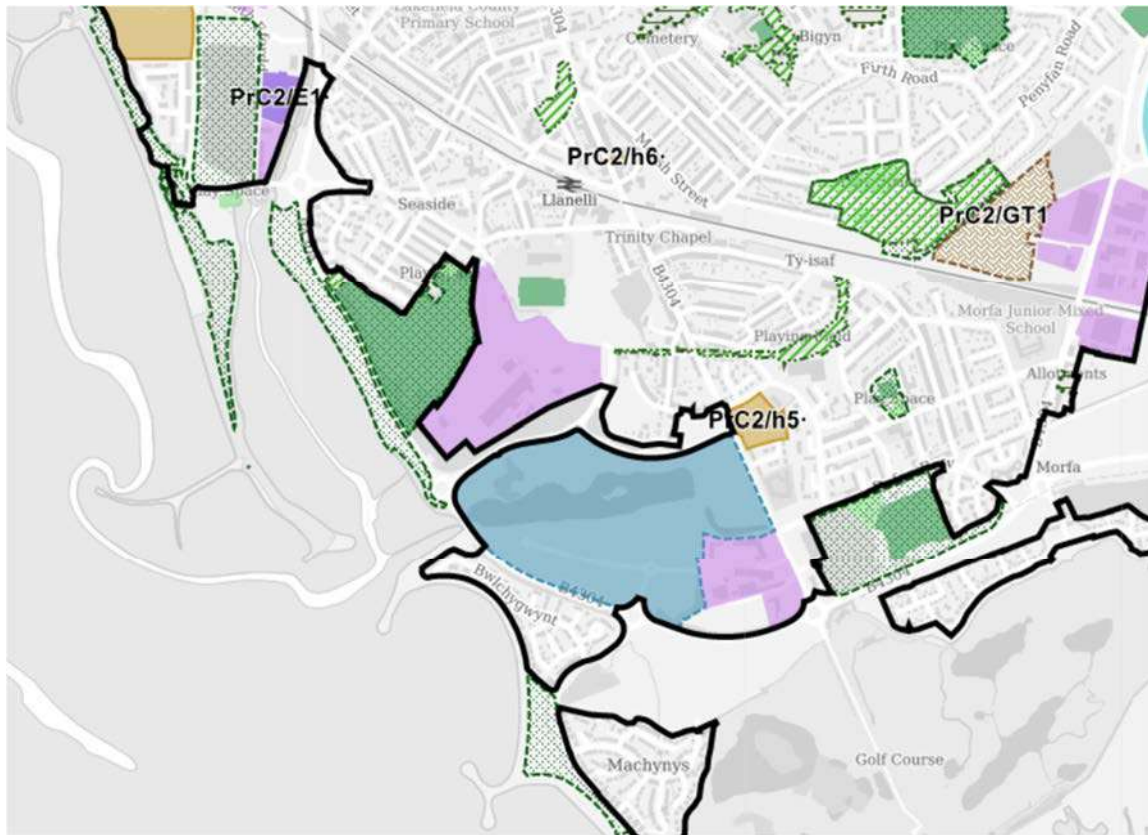


Image: example of pavement parking at end of school day on Copperworks Road.

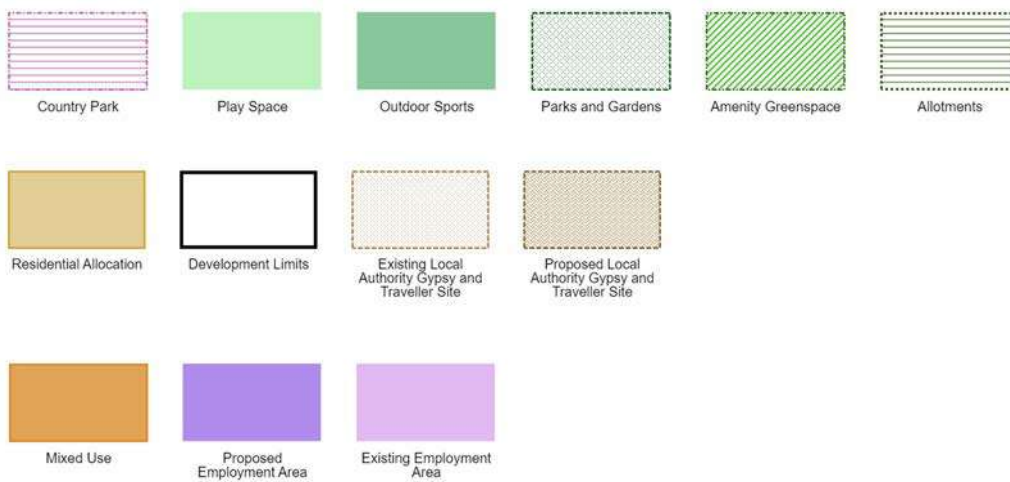
This was a brief visit on a single day only at the end of the school day. A school street / journey survey could be a valuable exercise to undertake with children of the street environment using tools published for this purpose. Citizen science projects may also be of value to count traffic numbers and assess air quality.

appendix 6 | extract of Local Development Plan Deposit Revised Proposals map 2018-2033

Source: Carmarthenshire County Council,
<https://carmarthenshire.opus4.co.uk/planning/localplan/maps/carlpprop>



Lilac – Existing Employment Areas



appendix 7 | extract of South Llanelli Supplementary Planning Guidance, 2014

Source: Carmarthenshire County Council,

<https://www.carmarthenshire.gov.wales/media/3697/adopted-spg-south-llanelli.pdf>

This extract evidences how the area around Ysgol Pen Rhos, which this guidance did not envisage, is at risk of being overlooked as it falls between other zones.

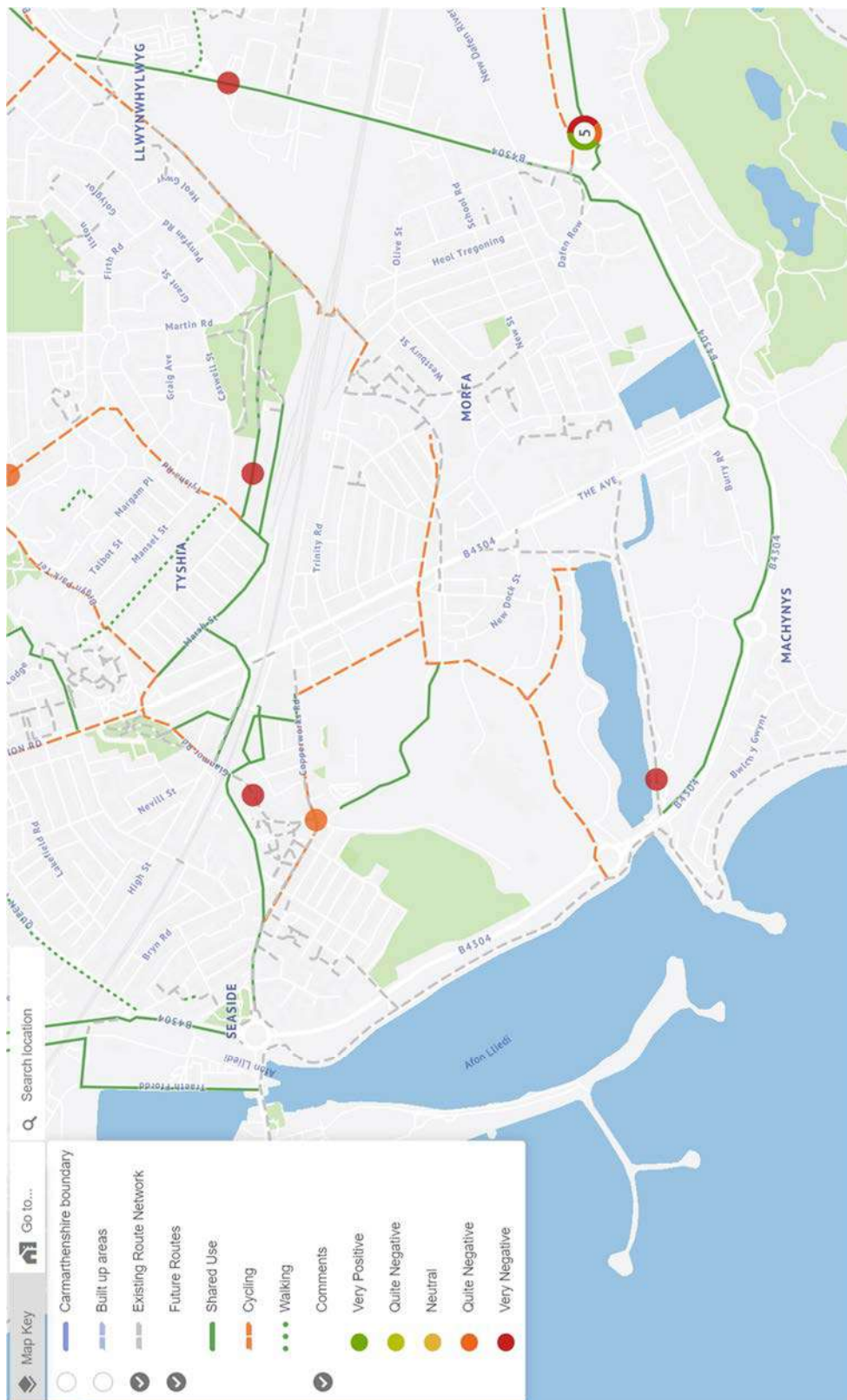
Figure 2: Aerial Plan



appendix 8 | extract from Carmarthenshire Active Travel Network Map

Source: Carmarthenshire County Council, <https://cyclewalkcarms.engaged.space/>

This is a consultation map that is now being finalised. The maps are required to be regularly refreshed by the local authority.



appendix 9 | stakeholder workshop & showcase

As part of the project a school showcase event took place on 22nd November 2022. Parents and caregivers were invited into the showcase after school and wider stakeholders from 4-6pm. Alongside this Urban Habitats hosted a stakeholder workshop to provide an overview of this action plan and obtain further comments and feedback. The aim of the workshop was also to raise awareness of the Making Space for Nature project, the action plan, and encourage these wider stakeholders to become involved in future actions. The action plan was presented as a resource for future use in developing interventions rather than a set of predetermined solutions.

Figure: Invite to School Showcase.



Showcase:

Below are a selection of photos of a series of stations in the school which were attended by pupils who welcomed visitors and explained the content of the stall. These stations included a range of work from a number of projects including Making Space for Nature.

- Station 1 – Nature in my community.
- Station 2 – Play and parks
- Station 3 – school grounds
- Station 4 – travel and safety
- Station 5 – my future

The Action Plan activity was within Station 5, My Future, and the overview provided adjacent to this space.



Figure: entrance hall, welcome sign.



Figure: model made by school of the school building

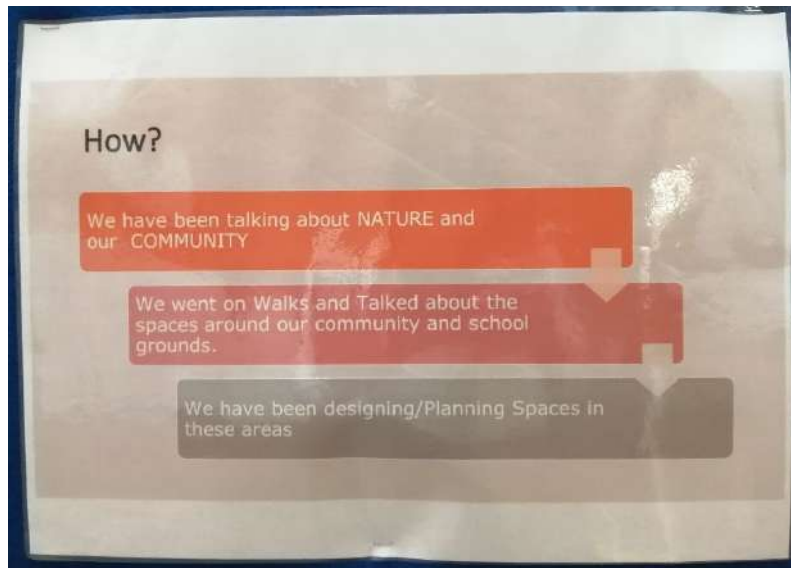


Figure: Phase II children's co-design, poster from showcase

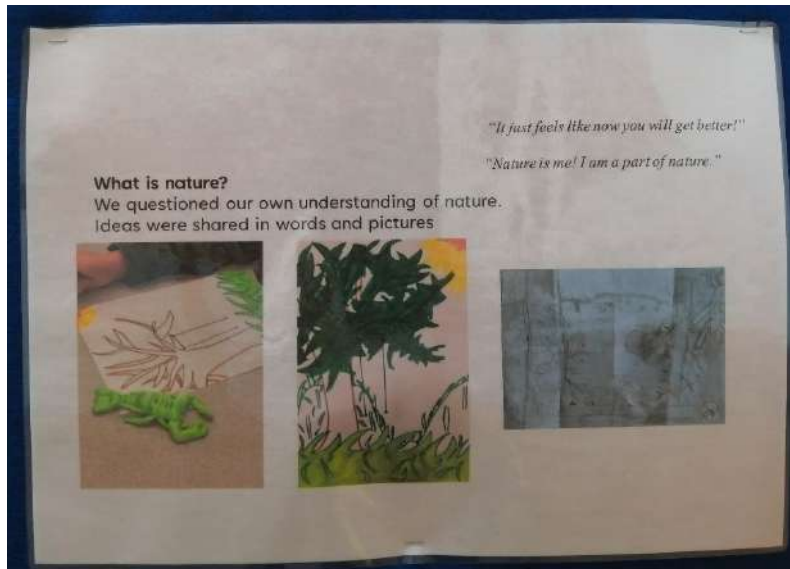


Figure: Phase II children's co-design, poster from showcase



Figure: Phase II children's co-design, poster from showcase



Figure: Phase II children's co-design, model from showcase



Figure: Phase II children's co-design, model from showcase

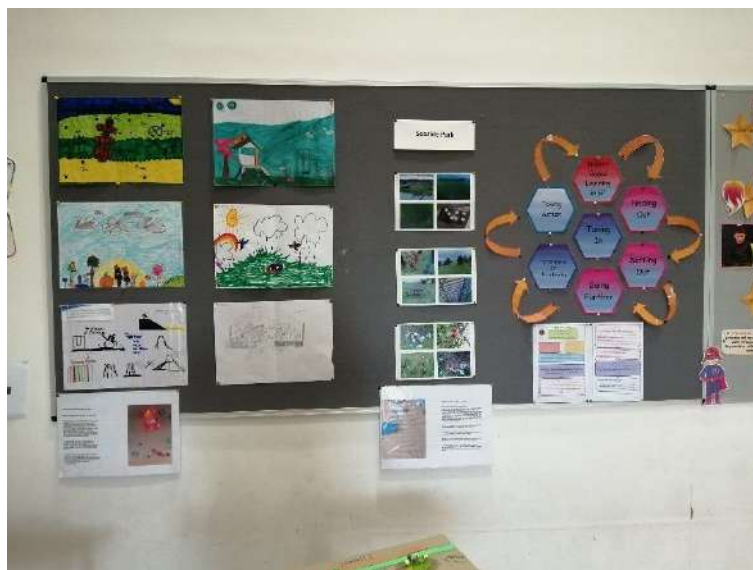


Figure: showcase presentations



Figure: station at showcase with a focus on waste, spray chalk templates



Figure: station at showcase with a focus on cycling and visit by bicycle doctor



Figure: Phase II children's co-design, model from showcase



Figure: showcase station images



Figure: children made a video about nature as a class activity



Figure: bee keeping in school grounds, showcase station



Figure: bee keeping in school grounds, showcase station



Figure: protecting sharks, showcase station



Figure: protecting sharks, showcase station



Figure: showcase station, 3D printed turtle



Figure: showcase station



Figure: showcase station

Action Plan Overview:

Action Plan overviews were shared between 4.00-6.00pm. Four groups saw the overview with a total of 24 people attending. The overview was open to anyone attending the showcase, specific people had been purposively invited to this session as stakeholders representing an organisation, voluntary group, public body, or wider stakeholders. Roles of those attending included (some individuals hold multiple roles):

- Teacher, Ysgol Pen Rhos
- Governor, Ysgol Pen Rhos
- President of Llanelli Rotary
- Chair, Llanelli Community Partnership
- Councillor, Carmarthenshire County Council
- Councillor, Llanelli Town Council
- Teacher, Ysgol Pen Rhos
- Teaching Assistant, Ysgol Pen Rhos
- Member, Llanelli Rotary
- Officer, Transforming Tyisha Team, Carmarthenshire County Council
- Leader, Antioch Centre
- Member, Antioch Centre
- Parent Governor
- Project Partner, Making Space for Nature
- Assistant Head Teacher, Ysgol Pen Rhos
- School Pupil
- Pentre Awel, Carmarthenshire County Council

- Environment / Air Quality, Carmarthenshire County Council
- Director of Research, School of Psychology, Cardiff University
- Rural Conservation Manager, Carmarthenshire County Council
- Technician in Outdoor Learning Centre, Ysgol Bro Dinefwr

Discussion points with attendees after a short presentation included:

- Immediate opportunity: linking to the wildflower project currently starting on the Millennium Coastal Path / Park across from Crown Park – project aims to increase biodiversity.
- How can links to the wildlife centre be made / included?
- Impacts on estuary environment: concern about the local community impact on the estuary and pollution going out to sea and then possibly having an impact back on the land in future.
- Antioch Centre, happy to meet and have a discussion.
- This action plan shows the value and necessity of working together / partnership working.
- Interest from Llanelli Rotary in supporting / linking with activities.
- Importance of outdoor space: especially considering Covid-19 and the need to support people's mental health.

Activity:

After the overview attendees were encouraged to participate in an activity. The aim of this activity was to encourage further thinking on what attendees had heard; to provide a small, meaningful activity to be involved in; to take an informal poll of which themes (from Phase II) attendees could most directly see they or their organisations could support. The activity involved placing a lolly pop stick into five boxes covering the four themes co-produced with children plus a wildcard / 'something else' box for people whose responses did not fit a theme. Overview attendees were provided with different coloured lollypop sticks therefore allowing these to be separated from other showcase attendees.



Figure: instructions for activity.



Figure: boxes for activity with four themes plus 'something else'.

Written responses were:

Mobility and safety:

- I think making space for nature like open another park
- Safer parking
- I want to vote for people to stay safe on line. (Not clear if online i.e. web or on railway line)
- Support pedestrian safety to encourage more walking and cycling
- Safe and accessibility - walks to and from school - flat pavements friendly for pushchairs and wheelchairs
- Make less petrol cars
- More disabled access
- Safer pathways leading to and from the school
- More waste bins in area to stop fly tipping

Nature in community:

Encourage wildlife with bird tables

- Farm
- Farm; nature walks; gardens for the senses; plant community; fruit and veg
- More flower areas
- Nature in any corner
- Save animals lives
- More trees and a bench
- Nature and biodiversity walk; free to access for the community at the Goods Shed in Marsh Street
- I vote for people to clean the community
- More dog-friendly areas / safe, enclosed spaces; less litter / broken glass
- Build bike parks / courses
- Pick up areas for trash in nature, forests, etc.
- More plants and trees
- More plants and disabled stuff

Figure: a drawn comment, "Save the Bees"



School Grounds:

- Make room for flowers
- Hedgehog homes in nature area
- Nesting boxes for birds
- Help bugs; clean up
- Develop school garden (sensory)
- More for children to do at play time
- Fish pond!
- Open school grounds out of hours
- Plant more fruit trees
- Woodland play area
- More equipment to play on / to do at play times

Parks and Play:

- More bins and less rubbish on the floor
- Clean and accessible play areas for children
- Communication boards in all parks (possibly related to biodiversity / It's for Them Campaign e.g.)
- Less rubbish in parks
- I want more parks
- Please add more parks
- A bench, to sit and talk
- More benches needed so people can enjoy sitting and watching birds and other nature
- Parks and play spaces to be safer i.e. more patrols to control vandalism

Figure: example of written response in boxes.

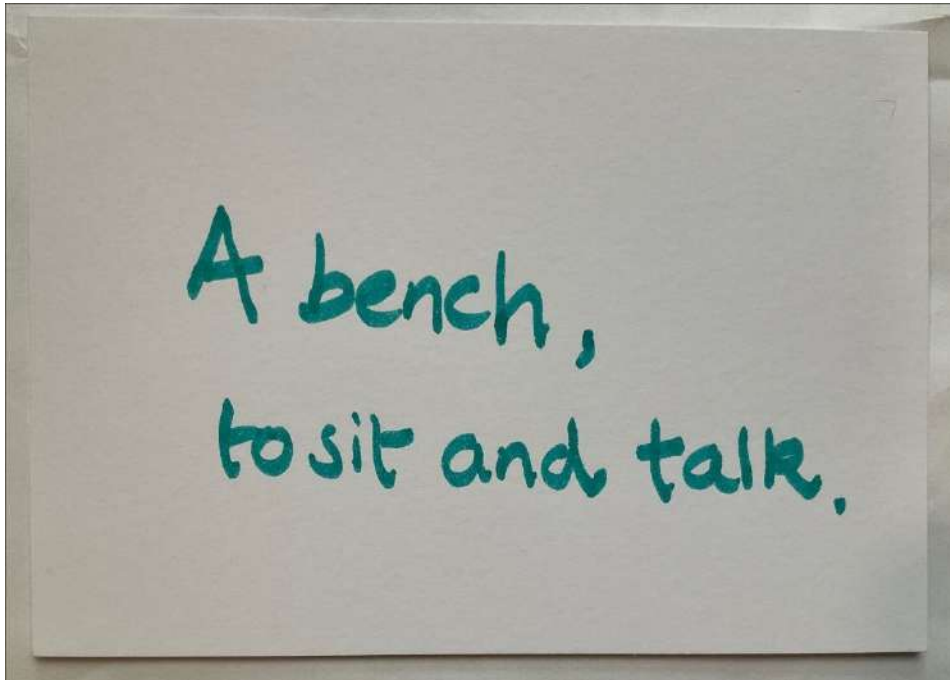
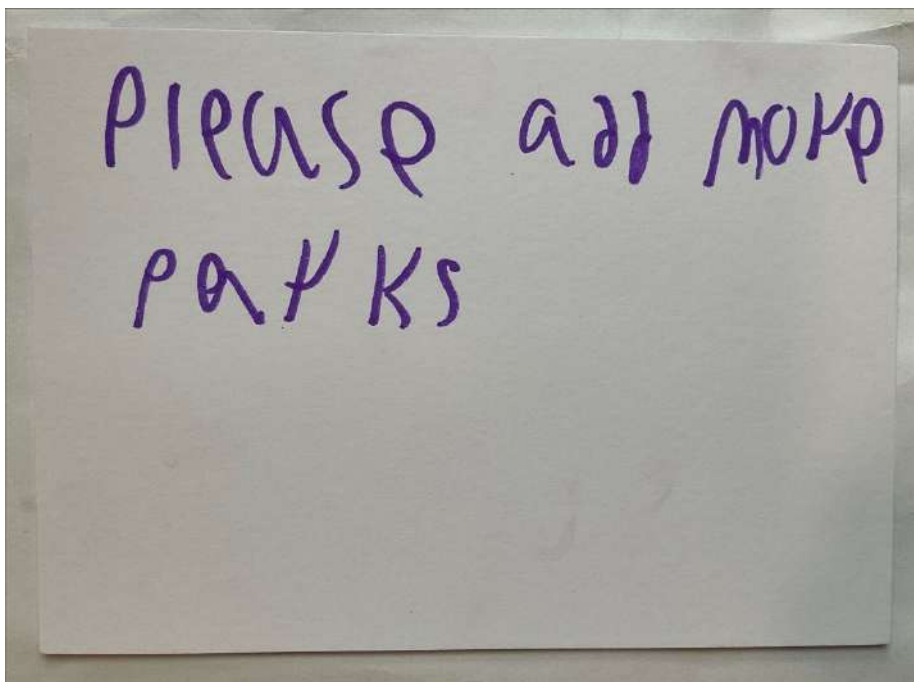


Figure: example of written response in boxes.



Something Else:

- More dog parks
- Empowering communities / community development
- Help with air quality monitoring around the school

Lolly pop responses:

About half (54%) of the lolly pop sticks distributed were placed in boxes so this exercise only gives an informal overview from a limited sample of people purposively invited to the session. Note that the question was what people felt they or their organisation could contribute to most.

Mobility and neighbourhood showed the greatest opportunity for support from these stakeholders followed by neighbourhood nature. Parks and play is some way behind the others. Only limited conclusions can be drawn from this informal poll and as plans develop it will be useful to monitor which themes stakeholders are engaging with or supporting and being mindful of the need for action across all four themes identified through co-production with the children.

		Yellow & Orange (Stakeholder session)	Other colours (Everyone)	Note
1	Mobility	12 (32%)	9	A third of the tokens demonstrated stakeholders can support on this item indicating a number of stakeholders who participated feel they can support on this. This is good because these public spaces might be areas that residents and the school feel less able to enact change in, however a number of stakeholders are from organisations that control change in these spaces.
2	School grounds	9 (24%)	20	A quarter of the tokens demonstrated stakeholders who participated can support on this item. One plausible reason is that some stakeholders feel they cannot make change in the school grounds. Future consideration could assess whether there are enough stakeholders already acting on this item or whether there needs to be communication to encourage others to contribute within the school grounds.
3	Neighbourhood	13 (34%)	17	A third of the tokens demonstrated stakeholders can support on this item.
4	Parks and play	2 (5%)	9	Few tokens demonstrated stakeholders can support on this item. It is plausible that this indicates more work needs to be done to identify stakeholders who can support this theme. Equally plausible is that fewer stakeholders feel they have control over this item. Strong support for this item has been shown outside of the session by the Town Council who also have capacity to act on this item.
5	Something else	2 (5%)	3	These specific ideas: dog parks, air quality, community development can be readily accommodated within the exiting four themes.
		38 (100%) equates to about 13 people		

appendix 10 | delivering on action plan values

The action plan values are derived from Urban Habitats' practis/ce values. Urban Habitats recognise our values at each stage of everyday practice and seek to evidence this. This checklist provided an initial assessment of strengths and areas to consider further at the outset of the project and has been reassessed and reflected on here on completion of the project.

Value	RAG Pre	Comment	RAG Post	Comment
Addressing population health		Yes, a central focus.	+ - -	Remained a central focus throughout. It is easier to see the challenges of putting it into practice at the end of the project so the challenges are more defined and are better understood by UH. Metrics of child health are challenging and tend to focus on negative / ill health. This action plan aims to 'join up the dots' however it is also clear that while there are many excellent individual things happening, sometimes they seem disjointed.
Addressing planetary health		Less of a focus but implicit in the work. Opportunities to consider further. Seems likely important to school groups / children.	+	The project exemplifies that planetary and human health are integrally linked. The children get it. Therefore, the contribution is actually more positive than originally assessed.
Working to reduce inequalities		Potential to contribute to this.		Any contribution of this project against such a massive challenge is very small. However the effort was definitely in the right direction. The approach of the school is informative to this in taking a trauma informed approach. Scale of challenge better understood – we were searching for coats in one session so a child could go outside for a walk. Positive potential – the response of the children to these activities shows the impact such co-design can have.
Creating with the community / end users		Phase 2 is very much focused on this.	++	UH participation in Phase 2 was invaluable and provided the opportunity to work with a leading academic, Dr Khan, in using co-design methods with children.

Evidence informed		Yes, integral to the project.		<p>The outputs are based on evidence.</p> <p>Perhaps less so in the academic sense but more centring (as intended) children's voice and views as valid evidence which is something that UH would state in past work and this project actually demonstrates putting that into practice.</p> <p>The response of elected members and public body officers to evidence from children was notable and how they really engaged with this.</p>
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Reflections on this tool:

- This is the first time UH have included a pre / post assessment of values in a report.
- Each value itself represents a huge global and societal challenge and therefore rating anything as 'green' is difficult as the amount one project can contribute is limited. However it needs to be assessed within the possibilities of the scope of the project and that is how it has been done.

appendix 11 | economic & business benefits from Accelerate delivered to Urban Habitats

This appendix evaluates how the infrastructure provided by the Accelerate programme through this collaboration project supported Urban Habitats as a business under the following headings:

- Background and relevance to Urban Habitats' strategy
- Evaluation of benefits specific to the project and identified in the project plan
- Evaluation of benefits relating to Wales healthy places agenda and Well-being of Future Generations ways of working
- Evaluation of benefits relating to global Urban Health agenda
- Evaluating co-design benefits reflection

The appendix identifies and evaluates how involvement in the project with the support of the infrastructure provided by the Accelerate programme has helped Urban Habitats develop itself as an enterprise by increasing its experience and credentials. And also how involvement has supported Urban Habitats to improve its products, services, and capabilities, including but not limited to, the areas of co-design and child health.

Background and relevance to Urban Habitats strategy:

Urban Habitats is a micro-business based in Wales focused on bringing evidence into practice. As such a core part of Urban Habitats purpose and values is the use of evidence. In business this is delivered primarily through consultancy and knowledge-based services.

This evaluation of benefits must be considered in light of the business values for Urban Habitats which are:

- Addressing population health
- Addressing planetary health
- Working to reduce inequalities
- Creating with the community / end users
- Evidence informed

These values are central to Urban Habitats' goals as a business and therefore the business objectives that flow from this.

Urban Habitats' expertise and therefore main sources of revenue are in the following disciplines:

- Public health
- Urban health
- Urban design

Urban Habitats work is across a broad range of sectors, following a Health in All Policies (HiAP) and a wider determinants of health approach. In other words, delivering wellbeing in Wales requires mobilising a broad range of actors in a broad range of settings including schools and local neighbourhoods as in this project.

Research and innovation in the built and natural environment sectors are historically low and there are systemic disconnects in translating existing evidence into practice (by which we mean industry / business / practice). Reliable data for innovation investment in relation to human health in these sectors is not readily available, for example, because Standard Industry Classifications (SIC) do not allow disaggregation of investment to the required level of granularity to separate, for example, urban health R&D investment from that in the design of nuclear power stations. Limited data on professional norms are available and Samuel (2019) identifies that fewer than 3% of UK architectural practices undertake evaluation of completed projects. This exemplifies a sectoral gap where at best limited process and output evaluation is undertaken and rarely is outcome evaluation undertaken in spite of governmental guidance requiring this (both at a UK and Wales level). The relevance of this

background here is that even seemingly small and incremental shifts in these sectors and addressing industry norms are in fact material to delivering on human health outcomes. It also means that because translation into practice does not happen automatically, there is great importance and value in activities that seek to translate and activate evidence into practice.

Evaluation of benefits specific to the project and identified in the project plan

The final part of this evaluation considers the potential benefits prospectively identified in the project plan. It identifies and evaluates how involvement in the project with the support of the infrastructure provided by the Accelerate programme has helped Urban Habitats develop itself as an enterprise by increasing its experience and credentials. And also how involvement has supported Urban Habitats to improve its products, services, and capabilities, including but not limited to, the areas of co-design and child health.

Urban Habitats' revenue is generated from consultancy services including the business' intellectual property and extensive knowledge base. As a learning organisation Urban Habitats has procedures to ensure that new knowledge and skills does not just reside within individual people but also become embedded in processes and ways of working – this is a competitive advantage for the business.

Skills and experience: specific examples of benefits include:

- **Co-design in a school:** Participating in the planning and implementation of co-design workshops and wider co-design process with a Year 6 group of children in a school. This extended Urban Habitats previous experience and Urban Habitats would now be confident to offer similar approaches as revenue generating services.
- **Child health:** Urban Habitats' previous work has included whole population / all age groups but not a specific focus on child health. This project required Urban Habitats to undertake a review of child health in the locality and engage with wider stakeholders on this. Urban Habitats as a result has increased knowledge and experience of assessing child health at a population level including some of the challenges public bodies face in doing so as well as future plans and frameworks in Carmarthenshire for assessing this. This knowledge and associated skills are a material benefit for Urban Habitats.
- **Networking in a live working condition:** the project has, as expected, increased Urban Habitats business contacts. Many of these were new and as a direct result of involvement in this project. Also, the importance of this being on a 'live' project cannot be underestimated. Such an opportunity provided Urban Habitats to secure meetings with stakeholders who it would not have been possible to meet otherwise and to demonstrate Urban Habitats skills and expertise in a live project setting. This is materially different and has greater impact for Urban Habitats than 'cold calling' or other softer forms of networking. These contacts provide several potential benefits:
 - **Potential collaborators / partners:** for future bids / projects / opportunities. This matters a lot because once a business opportunity is advertised (such as a tender / procurement opportunity) it is often too late at that point to form partnerships or find people with the relevant expertise. So established partnerships matter. The next hurdle is having an established track record of working together which is often a competitive advantage needed to successfully secure, rather than just pursue, opportunities: business growth and success is of course driven by securing opportunities not merely pursuing them. So this project supported by Accelerate provides both the business contacts as well as the track record of working together.
 - **Potential customers / clients:** several of the organisations that Urban Habitats engaged with are responsible for significant procurement of the types of services that Urban Habitats is skilled in delivering. The engagement Urban Habitats was involved in through this project has operated in two ways: raising the business' profile within these organisations; and providing Urban Habitats with knowledge of the relevant contacts within these organisations.

Whilst these benefits are difficult to precisely quantify at this stage, they are considered to be material and meaningful benefits for Urban Habitats by the company director and the planned objectives were

indeed delivered. The following table evaluates the benefits previously anticipated during the planning phase now that the project is completed.

Item	Benefit (increased experience, knowledge, skills, processes) for Urban Habitats from Accelerate project on this topic to deliver services. <i>direction of impact (+ve / -ve / neutral)</i>	Additional narrative
Research Strategy: Urban Habitats is developing an organisational research strategy, involvement supports developing this in context and understand how it can be implemented.	+ve	Involvement supported gap identification and a better understanding of collaboration approaches including the norms across disciplines. Additional knowledge considering how child health is addressed in this strategy in future.
Academic-industry partnership: developing business processes around partnership working across academia and practice.	+ve	Increased understanding of commercial aspects of multi-party partnership agreements. Increased understanding of interdisciplinary working across different academic disciplines and the differing norms across disciplines.
Future development: positioning Urban Habitats to bid in future for research and innovation funding, such as to Innovate UK.	+ve	Urban Habitats can now use this project as an example of successful delivery on future bids. This is important to demonstrate track record in working on industry / academic partnerships and on publicly funded projects.
Networks & collaboration: establishing working relationships with collaborators for future potential project and research work.	++ve And more than initially anticipated.	<p>The organisations within Appendix 1 were all new to Urban Habitats who have not worked with these organisations before. The project provided valuable contacts in the context of a 'live' project rather than simply networking which is far more valuable because it provides Urban Habitats with the opportunity to demonstrate its skills and expertise.</p> <p>Through this project, Urban Habitats has become aware of several future specific planned objectives of stakeholder organisations which have the potential to be revenue generating business opportunities for Urban Habitats:</p> <ul style="list-style-type: none"> • Implementation of the forward actions from this project. • Future development of Wellbeing Assessments and

		<p>Wellbeing Plans in Carmarthenshire PSB.</p> <ul style="list-style-type: none"> • Future planned development of Supplementary Planning Guidance on wellbeing in Carmarthenshire. • Future planned activities and funding bids within schools climate action network.
Brand recognition & networking: enhanced recognition and knowledge of Urban Habitats with the project partners.	++ve	<p>The project partners were all new to Urban Habitats who have not worked with these organisations directly before. The project provided valuable contacts in the context of a 'live' project rather than simply networking which is far more valuable because it provides Urban Habitats with the opportunity to demonstrate its skills and expertise.</p> <p>This network building is also important to support future delivery of services in developing working relationships that have the potential to be carried into future revenue generating opportunities for Urban Habitats.</p>
Good practice in the sector: raising the bar of good practice in assessing health outcomes in the sector is vitally important for Urban Habitats' future development as this is the focus of it's business.	+ve	<p>The project has exemplified aspects of good practice particularly around co-design. It has also provided real opportunities to share that good practice more widely and future activities are planned which will further support Urban Habitats in seeking revenue generating opportunities.</p>
Successful case study: for future work, it is valuable to have examples of successfully completed past projects. This project supports that.	+ve	<p>This is important for securing future revenue generating opportunities. The project partners and funders provide additional credibility to Urban Habitats ability to successfully work with such organisations.</p>
Supply chain benefits in Wales: Urban Habitats prioritises working with like minded businesses in Wales. Many of our suppliers are based in Wales and Urban Habitats will buy products as part of this project, such as IT support services from	+ve	<p>Minimal however this project allowed the continuation of these supplies for the duration of the project.</p>

Tech Wales, an SME in Port Talbot.		
<p>Building scale of Urban Habitats: whilst a fairly small investment in cash terms the importance of this for Urban Habitats should not be underestimated as it plays an important role in sustainably growing the business and diversifying our customer base beyond our existing client base. As part of the wider business, the income and benefits from this project also supports Urban Habitats confidence in business decisions and growth in future.</p>	+ve	<p>The project both delivers and is an enabler. Whilst the focus of evaluation may be on what was delivered during the project however the bigger business benefits are really for what this enables in future.</p> <p>Specific benefits are:</p> <ul style="list-style-type: none"> • Increased business contacts and working track record with partners • Increased business contacts with collaborators and stakeholders • First project successfully delivered on with backing from public funding of this type and a successful case study for securing future revenue generating services • Significant additional knowledge transfer and know how in the areas of co-design and child health

Evaluation of benefits relating to Wales healthy places agenda and Well-being of Future Generations ways of working

The accelerate programme objectives include:

- Promoting sustainable economic development for Wales
- Establishing sustainable enterprises:
 - creating evidence-based health and social care products, services and treatments
 - with potential for local, national and international impact

Sustainable here is defined in line with the Well-being of Future Generations (Wales) Act 2015 sustainable development duty, that being the, "...process of improving the economic, social, environmental and cultural well-being of Wales by taking action, in accordance with the sustainable development principle, aimed at achieving the well-being goals." And the sustainable development principle that aims, "...to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs."

Three frameworks have been used to assessed to assess how the infrastructure provided by the Accelerate programme through this collaboration project supported Urban Habitats as a business: the Wellbeing Goals; Ways of Working; and priority areas in the most recent Future Generations report.

The wellbeing goals provide a framework for holistic evaluation of the areas where Urban Habitats benefited. The benefit being assessed here is on Urban Habitats' ability and effectiveness as a business to develop in delivering revenue generating services in relation to these areas:

Wellbeing goal (National Assembly for Wales, 2015)	Benefit (increased experience, knowledge, skills, processes) for Urban Habitats from Accelerate project on this topic. <i>direction of impact</i> (+ve / -ve / neutral)
A prosperous Wales	+ve
A resilient Wales	+ve
A healthier Wales	+ve
A more equal Wales	+ve
A Wales of cohesive communities	+ve
A Wales of vibrant culture and Welsh language	neutral – a potential future area of development and focus
A globally responsible Wales	+ve

The ways of working provide a framework for holistic evaluation of the areas where Urban Habitats benefited as well. The benefit being assessed here is on Urban Habitats' ability and effectiveness as a business to develop in delivering revenue generating services in relation to these areas this includes through knowledge exchange:

Ways of working (National Assembly for Wales, 2015)	Benefit (increased experience, knowledge, skills, processes) for Urban Habitats from Accelerate project on this topic. direction of impact (+ve / -ve / neutral)
Long term	+ve very much a central focus of the project
Integration	+ve very much a central focus of the project
Involvement	+++ve very much a central focus of the project & working through Phase II & III on delivery of co-design outputs.
Collaboration	++ve
Prevention	++ve

The most recent Future Generations Report also sets out priority areas of focus and the benefits of Urban Habitats' involvement in this Accelerate project are evaluated against these also, it can be seen that a number of these priority areas have been addressed as part of this project which supports Urban Habitats in future in delivering revenue generating services:

Areas of focus in 2020 (Future Generations Commissioner for Wales, 2020)	Benefit (increased experience, knowledge, skills, processes) for Urban Habitats from Accelerate project on this topic to deliver services. direction of impact (+ve / -ve / neutral)
Land use planning and placemaking	+ve
Transport	+ve
Housing	<i>out of scope / potential to apply methods</i>
Decarbonisation	<i>out of scope / potential to apply methods</i>
Skills for the future	+ve
Adverse childhood experiences	+ve / not core scope, experienced gained working with Ysgol Pen Rhos who take a trauma informed approach
Health and wellness system	+ve

A healthy places agenda in Wales has developed over the last decade. Through this project it was identified that for example in Hywel Dda Health Board this is an emergent area of work and a potential opportunity area for Urban Habitats to work on given this is it's field of expertise.

The impacts on human health impacts from environmental determinants including nature which was the focus of this project are widely published and not repeated here. Public Health Wales has published a list of six priority areas:

Priority (Public Health Wales, 2018)	Benefit (increased experience, knowledge, skills, processes) for Urban Habitats from Accelerate project on this topic.
Walking and cycling infrastructure	Yes – an important
Green and blue infrastructure	Yes – a central focus of the project
Food growing and retail environment	Yes – a related focus of the project
Community, health and social care services from local facilities	Out of scope
Low levels of air pollution	Yes – an unexpected and ultimately important focus of the project
Building design	Yes – not core scope but related to nature in school building

Evaluation of benefits relating to global Urban Health agenda

The wider UK and global significance of Urban Habitats’ work and the Making Space for Nature project in relation to this is evidenced in the World Health Organization’s priorities for urban health (WHO, 2022). The Making Space for Nature project (and thereby the supporting Accelerate infrastructure) directly addresses the thematic area of “biodiversity and the links between natural environments and health” (WHO, 2022):

WHO Urban Health research priority	Benefit (increased experience, knowledge, skills, processes) for Urban Habitats from Accelerate project on this topic. direction of impact (+ve / -ve / neutral)
Strengthen links between urban health research findings and actions to promote urban health	+ve
Build city-level evidence on the relationship between policy, environmental, economic, and social factors in urban environments and health outcomes	+++ve – specifically at the Llanelli town scale and the Seaside neighbourhood scale. This included identification of gaps at a Carmarthenshire scale, such as the lack of children’s voice in the Wellbeing Assessment.
Generate evidence on under-researched thematic areas	+++ve – specifically, climate change, biodiversity, natural environments
Generate evidence on under-researched urban population subgroups	+++ve – specifically children and their caregivers

It should be noted that co-production, which was the approach in this Accelerate project is a core guiding principle of urban health priorities for WHO:

“Rather than static and siloed research processes, research processes should prioritize the co-production of knowledge. Such research generation should be grounded in community participation and collaboration, particularly with stakeholders who are typically underrepresented in decision-making.” (WHO, 2022)

Evaluating co-design benefits reflection

This evaluation is specifically focused on Urban Habitats and the material benefit that participation in this project, supported by the Accelerate infrastructure, has delivered.

For future and for wider reflection, this evaluation considers the potential need to develop evaluation methods that assess co-design or co-production interventions. Co-production is an urban health priority for WHO so this point is of wider relevance if the impact and benefit of such approaches is to be truly realised for population health.

Urban Habitats aims to create good work in local places through co-production approaches. The reason for this is health creation through the pathway of supporting community agency as a determinant of health and wellbeing. A mainstream or typical consultancy / business model with a focus on growth would mean jobs creation within the enterprise directly or as suppliers / sub-contractors and existing economic models incentivise this.

So in evaluating co-production approaches in future it is worth considering that it is equally likely to see employment and other wellbeing opportunities created at the local level and within local organisations with support to implement this. It is not clear that existing evaluation metrics fully capture the potential of this. This in itself could be considered valuable learning from this project.

As a simple example of this 'shift' of benefits in the context of Making Space for Nature, evidence on biodiversity collected and shared with a stakeholder organisation during this project was able to support them in submitting a bid for lottery funding that would create paid employment roles. If that bid were successful, the benefit would be realised within that organisation and within the community.

These reflections in turn provide additional potential benefits for Urban Habitats in providing revenue generating services to support organisations working on these issues.



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