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Introduction

Students and staff from 12 partner schools met up at Bristol City Hall in October 2022 as part of Bristol Education Partnership's (BEP) Climate Challenge Project. This project started in 2019 when the partnership was launched, and schools have been working on it ever since. The focus of the October event was to explore how BEP schools can collaborate in working towards Bristol's target of reaching net zero carbon emissions by 2030.

The day consisted of workshops in the morning to revisit the key issues that schools are working on – energy, food, transport, resources and nature. There was also a discussion about how climate change education can be incorporated across the curriculum. At the end of the morning, students met with their head or a senior leader to agree next steps within their own schools. These Next Steps for Schools are reported below.

An afternoon event with invited guests, which took place in the Council Chamber, provided an opportunity for schools to showcase their work and the progress that they are making. The event was opened by the Mayor, Marvin Rees, who spoke about

“
Keep doing what you're
doing: your voices will be
heard. You can and will
make a difference”
Mya Rose Craig

the key role that cities play in tackling the climate emergency. Bristol, with its One City Plan towards net zero, is at the forefront of this agenda nationally.

The students' presentations evidenced the considerable work going on across the partnership over a number of years to address climate change.

“It is encouraging to see the positivity and passion these young people have towards the current climate and ecological crises. They are empowered to make a difference in their communities, the city and in the curriculum.”

Bristol Mayor, Marvin Rees

We were delighted to be joined by Jonathan Clear, Chief Sustainability Officer for the Department for Education (DfE). Jonathan had participated in a meeting with BEP heads and senior leaders in the morning to explore how schools across the partnership can collaborate in their efforts to reach net zero and this is reported below. In the afternoon he gave a short talk, outlining the work being undertaken by the Department on its Climate Change Strategy.

Our closing speaker of the day, ornithologist and environmentalist, Mya Rose Craig, otherwise known as BirdGirl, encouraged students to keep going with their work and ended on a message of hope. If we all work together, we CAN make a difference.

Prior to the event, students had prepared a pop-up exhibition of their schools' environmental aims and achievements, and this was on display in the Foyer at City Hall throughout the afternoon for visitors to see.

The climate emergency affects us all, but for young people, the issue is more pressing than ever. Their futures are at stake and they are becoming increasingly vocal in their demands for action. It is vital therefore that schools play their part in reducing climate emissions as part of local,

national and global efforts to tackle this crisis and that students have the opportunity to get involved in this critical work. It is our intention that the Bristol Education Partnership's Climate Challenge Project offers such opportunities.

The purpose of this Report is to share information about what is happening across the Partnership at student, staff and senior leader levels in the hope that this will inspire and support further change. We will be meeting up again in the new year to track progress and continue on our journey towards Net Zero.

Fiona Carnie

Project Lead, Bristol Education Partnership



The View from BEP School Leaders

Head teachers and senior leaders from 12 of the 14 BEP schools met to identify and discuss the challenges they are facing to deliver on the climate agenda, and what the potential solutions and collaborations might be. This discussion was facilitated by Richard Martin, Climate Change Strategy Manager at Bristol City Council with a view to exploring how the Council and partner schools can work together on this. The discussion highlighted the fact that many head teachers felt that their hands were currently tied by lack of capital finance, planning policy, the structure of the curriculum and internal capacity to engage.

Key areas discussed included:

- energy use in schools, and the potential for solar PV
- insulation and double glazing
- school vehicle use and the shift to EVs
- engagement with parents
- restrictions of PFI and listed buildings
- the need for climate leadership within schools at a senior level, and dedicated capacity to work on this
- the potential to change the curriculum to include more climate content, and the opportunity to work on climate within the existing curriculum.

The sustainability lead from the Department for Education (DfE), Jonathan Clear, spoke about these issues indicating that they were being raised and discussed by many schools as well as within the Department. He emphasised that the DfE's [Sustainability and Climate Change Strategy](#) considers these in more detail.

There was general agreement that mapping out these 'hand tying issues' in more detail would be useful, and that multiple school leaders focusing on a few areas could lead to actions to resolve some of them. Bristol City Council agreed to convene such a meeting.



Working with Environmental Organisations

BEP is fortunate to have the support of a number of prominent environmental organisations. During the morning, students worked in small groups with representatives of these bodies to explore the key themes that are being tackled in our project:

- Energy – Centre for Sustainable Energy
- Food – Soil Association
- Transport - Sustrans
- Resources – Bristol Waste
- Nature – Action 4 Conservation

There were also workshops, led by Sustainable Hive, on how to raise awareness of the climate agenda across school communities, and how to involve all stakeholders right across the school organisation (students, staff, parents and governors) in progressing this work. Short summaries of these workshops are included below.



Energy

Kate Elliott-Rudder, Centre for Sustainable Energy

During the Energy workshop, groups shared energy saving tactics that their schools are already doing, and we ran a scenario about steps to install renewable energy at their school. Many of the groups shared that they are putting pressure on teachers to turn off lights and appliances when not in use. Some schools have installed solar panels, air source heat pumps and even a biomass boiler. During the session students were given a simulation timeline for installing solar power on their school roof. The groups considered steps like writing to the owner of the building for permission, asking their site manager to do a feasibility assessment, fundraising and most

importantly, they identified the key staff members they needed to approach first. At the end of the workshop, students were asked to share one take-away action to investigate based on what they'd learned from other schools and the timeline scenario. Examples of actions that the groups want to investigate included: finding out who their site manager is, researching heat pumps, researching community energy, campaigning for automated lights, checking who the school energy supplier is, preventing heat loss by closing windows and campaigning for EV car charging spots.



Food

Hattie Clark, Soil Association

The Food workshop group had an interesting discussion about healthy eating, meat consumption, growing food and using local suppliers. The main topic addressed was how to reduce meat consumption. It transpired that most schools represented had at least one meat-free day a week. However, this was seen as a challenge as a large number of pupils do not want to try different foods with the consequence that many choose not to eat a school lunch on that particular day. Ideas were then shared about how education and awareness-raising provide a great way to encourage more sustainable eating behaviours. One school had set up an information board in the cafeteria where facts were posted about eating more plant-based meals to educate pupils on making changes to their food choices. This resulted in a higher uptake of meat free meals.

We discussed how reducing meat should go beyond just one meat-free day a week. Some pupils had had meetings with their catering team to improve plant-based and vegetarian options

to appeal more to young people. One school did this by gathering pupil feedback on the vegetarian choices which they fed back to the catering team. Another school trialled introducing two plant-based options per day and just one meat option to increase the choice of vegetarian options. They also introduced more plant-based proteins such as beans and pulses to mirror the meat options, for example a vegetarian chilli. This is important as beans and pulses are more affordable and healthy.

It was suggested that schools might assess the carbon footprint of their food. This could be an interesting project for a school group to undertake by doing a school food analysis to compare the meat and vegetarian options and how vegetables can provide a sustainable, seasonal and local alternative.

Finally, we discussed the issue of food waste and how schools are working together with their catering teams to reduce this. One school has tackled this issue by setting up a food bank to give away unused produce to families and members of their community most in need. This had a positive impact as it enabled food that was going to waste to be re-used to benefit the local community.



Working with Environmental Organisations



Transport

Emma Cocksedge, Sustrans

Students from six BEP schools were involved in the session on transport and how it can support net zero. The discussion started off with updates from each school on the current levels of active travelling for students' journeys to and from school, what activities or facilities are already in place to encourage and enable active travel, and how currently their school addresses transport for school trips. This highlighted the fact that levels of active travel varied greatly between schools, for various reasons, and the various barriers which were getting in the way. We then moved on to talk more about the barriers which were stopping pupils from actively travelling. The main barriers were prioritised to be: lack of awareness and apathy; living too far away; safety concerns; weather and not having access to a cycle. As a group we talked through possible ways to address these. We finished off by considering what priority actions would suit their individual schools and the main messages and tasks they were going to take back to share. These included: finding out how many people actually actively travel to school; contacting the council about dangerous and illegal parking; setting up car sharing and bike loan schemes; running ongoing incentive schemes to motivate active travel and to increase awareness through information on websites and delivering assemblies.

"It was a great session and I very much appreciated how engaged and proactive the pupils are. They are clearly very switched on about climate change and want to make a difference. They are a real asset to their schools." Emma Cocksedge, Sustrans



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Working with Environmental Organisations



ACTION
FOR CONSERVATION

Nature

Holly Chantrill-Cheyette, Action for Conservation

We started our session by coming up with collective definitions for 'nature' and 'biodiversity' to put the session into context. We then played a game to work out the goals of the Bristol Net Zero Target by piecing together individual words to create the aims.

The students chatted to each other about what they are currently doing in their schools to nurture biodiversity and nature, and each group was invited to share details with the whole group by introducing another school's projects. It was amazing to hear of all the wonderful things they are doing, including creating herb gardens, planting trees and starting wildflower meadows. The students then created some colourful and inspiring drawings of their 'dream eco-school' and were encouraged to think about how their ideas linked to helping biodiversity and nature. To finish, each student wrote their key ideas or take-away messages on a leaf-shaped piece of paper and pinned it to a drawing of a tree to create a display of ideas and inspiration.



Resources

Nohelia Fernandez, Bristol Waste

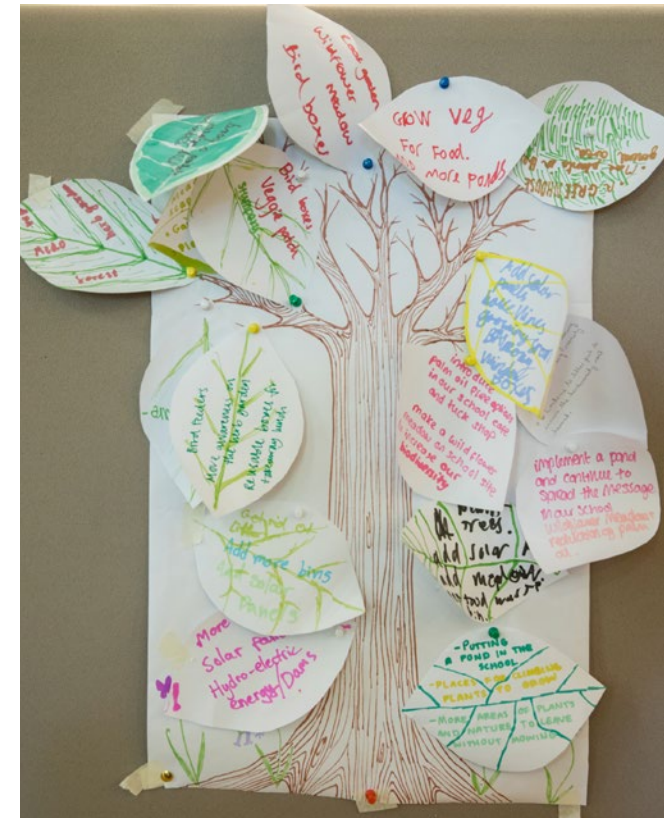
We started off with all the pupils introducing themselves and stating what they are already doing in their schools to reduce their waste and make better use of their resources. It was emphasised that we need to see all of this as resource management rather than just waste management, as we need

to ensure that we are reducing waste by making better use of the resources available to us. The Waste Hierarchy was introduced, which none of the students had heard of before, and we discussed which elements students thought would be most important to focus on in order to reduce our environmental impact and make better use of resources for the Earth. It was noted that we shouldn't just automatically turn to recycling as an answer as this does not necessarily make the best use of resources. In the first instance we should focus on waste reduction and re-use instead.

We then covered the Buy Hierarchy which looks at what we should do in order to consider what we consume. The most influential thing we can all do is to use what we have and repair what we can. This led to a discussion about how we can improve that which is already in place in schools, such as uniform swaps and second-hand clothes swaps but which don't currently have a repair element.

It was suggested that mending could be encouraged in Textiles/Design Technology lessons and that teachers could assist by teaching the skills required to mend clothes and uniform. Students then considered what they can do, especially during lunch time, to tackle food waste. They were keen to discover where the waste actually goes and what happens to it. Does energy recovery happen at any point with any of the waste? Does any of it go to landfill?

At each stage of the workshop students had a chance to challenge what they know is happening in their schools and how they can find out more about what else can be done to make waste streams more transparent and more circular. They learned from each other and discovered what other schools are doing that perhaps they could implement and adapt in their own settings.



Working with Environmental Organisations

Sustainable HIVE

Organising within the School and Community *Libby Bowles, Sustainable Hive*

Students were challenged to break their ambitions towards net zero into steps to success and identify where different stakeholders were engaged. After recognising these steps to fulfil their eco ambitions they identified blockers, or potential blockers, such as senior leaders, catering managers, fellow students, site and finance managers.

We discussed strategies for overcoming barriers and winning round the blockers. We identified that understanding the blockers' goals and pressures, talking their talk, exploring what might interest and motivate them, the power of students, and the value of asking the right questions, and using good listening skills were all effective tools to work collaboratively with them. Students reviewed their plans and shared their blockers and the steps they were going to take to get past them.

"This was a truly passionate, motivated and capable group of students that I am confident will thrive with continued support. It was real pleasure to work with them all." Libby Bowles, Sustainable Hive



Raising Awareness

Jo Taylor, Sustainable Hive

This session was all about taking a deeper dive into raising awareness. A seemingly innocuous 'facts about yourself' icebreaker activity served as an example of different styles of strategic thinking and thinking outside the box, blue-sky ideas and actions. Some students started by asking questions about rules, some abandoned ideas part way through, some tested prototypes and others gave unusual ideas a go, even though they didn't know if their idea would work. This was a great model of the wider world and risk-analysis behaviour when considering climate crisis awareness raising. Students discussed the importance of trying novel methods, risk taking, resilience and reframing how to think about problem-solving of various issues.

In school teams, students performed a character profile of their target audience; the audience they want to have a breakthrough with as part of their school climate focused projects. They analysed their drivers and motivation, to then consider how they could bring a big blast of fresh air to the project and grab attention in a captivating way to help create positive change. This should include blue sky ideas as well as more school-sized ideas – nothing should be off the table or discouraged, rather a shift in mindset taken about how the bigger ideas could be achieved. Making the most of social media platforms and local press was also encouraged – the press is particularly keen for good-news stories at the moment in a time of such huge doom and gloom, so students should be bold, positive and dream big.

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This was a truly passionate, motivated and capable group of students that I am confident will thrive with continued support. It was a real pleasure to work with them all”

*Libby Bowles,
Sustainable Hive*



Climate Change Education across the Curriculum

A workshop led by Dr Nicola Warren-Lee of the University of Bristol's School of Education with some of her students, provided an opportunity for school students and staff to look at how climate change education is integrated across the curriculum. They also discussed what more can be done to ensure that young people have the knowledge, skills and attitudes to equip them for our changing world and to enable them to make a positive contribution towards tackling the climate emergency.

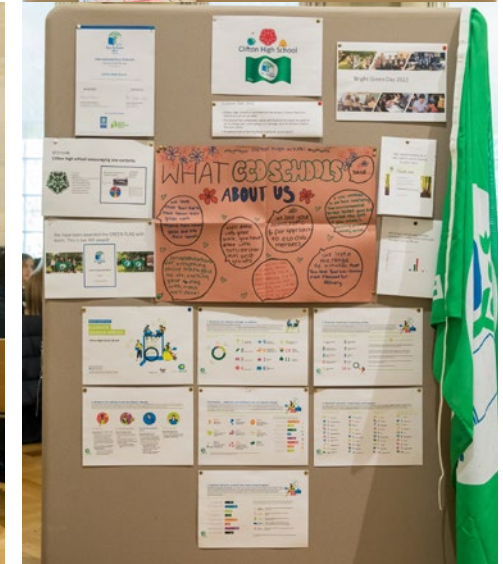
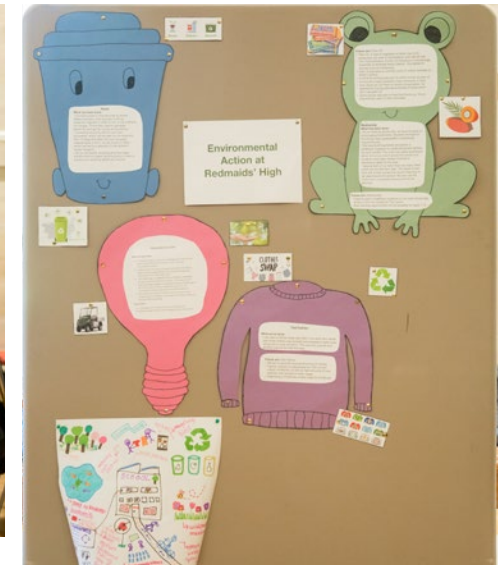
The chart on the following page captures how some partner schools are already including climate change in different curriculum areas, with some suggestions from participating students about what more can be done.



Climate Change Education across the Curriculum

SCHOOL	What the school is currently doing. What school subjects are teaching about Climate Change (CC)	Students' suggestions for changes to the curriculum to include Climate Change
Bristol Free School	Students felt they had quite a lot of climate change education in the curriculum – eg learning about sustainable transport systems in geography	D&T and Physics - could include energy efficiency and building efficiency Business Studies – could include content on how businesses can have a positive impact on the environment/society and be more sustainable Food Tech - could learn more about food waste
Bridge Learning Campus	Climate change is covered in the geography curriculum. Business Studies – ethical consumption is covered.	Food Tech - more local/vegan food could be used in ingredients. School may start small-scale subsistence farming. Textiles - Sewing club suggested (make do and mend concept). History – suggest introducing an analysis of the Club of Rome climate predictions
Clifton College	Chemistry includes the impact of greenhouse gases on climate	Photography – hold climate themed exhibition MFL – include case studies of what each country (France/Germany/Spain etc.) is doing to reduce their climate impact.
Clifton High School	Students felt that the school has good CC curriculum in geography.	Maths - could look at climate stats English - could write climate change speeches History - could look at industrial revolution and link to climate change through time
Cotham School		Students suggested having a Climate Week with mandatory climate change lessons for years 7-9 and making sure it is incorporated more into the curriculum/lessons for all years
Collegiate School	MFL – students already learn climate themed language.	English - use climate theme poetry in poetry topic; book references; touch on climate in context of area being covered; introduce as non-fiction topic in year 7, use sources about climate change PSHE/tutor time - bring in lesson time focusing on climate change, including things like sustainable living; empowering voices in general terms; bring in climate speakers; have a de-stress afternoon occasionally, get the students outside into their natural environment; introduce planting a plant in their outside time Art/DT - team projects: suggestion of a large project such as making an octopus from plastic bottles, can interlink with ocean topic in geography. Geography - Field trips such as a beach field trip, dedicate an hour to litter picking which can be taken back and used in art projects. Link to drama, producing costumes from recycled clothes.
Fairfield High School	Good CC curriculum in Geography and Science particularly at KS4 Sustainability is a theme for 1 term a year.	Students suggested including climate change education in all subjects even where not explicit e.g. examples of data in maths and conversations in languages (maybe through training for teachers) They were keen to think about OFSTED and whether sustainability could be included in their assessment and wanted to start a writing campaign to OFSTED. Citizenship - more inclusion of climate change education felt like a very obvious opportunity.
Orchard School	In Science they are learning about the impact of climate change - i.e. carbon dioxide In Geography they are learning about climate change impacts eg. extreme weather events	PE - could introduce a 5-10 minute session in some lessons where students will appreciate the environment they are in (natural environment). MFL - could introduce the impacts and fight against climate change in France/Spain. This would help students to understand climate change as a worldwide issue and make students feel like they are not the only ones battling. Science - making small wind turbine models that can be attached to batteries (electricity)
Redmaids' High School	Chemistry content includes greenhouse gas impacts English - poems/readings used to help engage people in different ways Maths- problems about climate change included	Students said that there is not currently enough time to learn about climate change in their GCSE/A level years. They suggested collaboration between subjects/years to share knowledge - eg. year 12 students volunteering with younger years to expand their knowledge, organising drop-in sessions for year 10/11s about subject/environmental areas; instigating subject themed discussions about the environment. Also: History - could include environmental movement e.g industrial revolution Textiles department could repair old uniform to reduce excess clothes buying (in addition to discussing reducing old uniform to make new items) RPE - can environmental themes be included? Eg. how is climate change viewed in different religions; how does it affect different people in different ways?

Pop-up Exhibition



Next Steps for Schools

Here are the commitments made by BEP schools during the event:

Bridge Learning Campus

- Investigate the school's waste system and develop it in response to student views
- Explore possibility of setting up a uniform swap shop
- Encourage people to switch off devices when not in use
- Talk to kitchen staff about introducing Meat Free Mondays

Bristol Free School

- Plant a herb garden and sow a wildflower meadow
- Use seasonal food in the canteen and food tech lessons
- Look into more eco-friendly energy providers

Bristol Grammar School

- Encourage more walking and biking to school by exploring Bikeability schemes, new bike rack locations and highlighting alternative routes to school
- Introduce more food waste bins around the food site and consider how we can reduce waste
- Make school meals more sustainable by looking at our food suppliers and proposing a school lunch committee

Clifton College

- Get parents not to idle their cars' engines while waiting outside school
- Tackle food waste in the canteen
- Switch off white boards when not in use

Clifton High School

- Introduce Bikeability and bike maintenance for older students
- Carry out an energy audit on school buildings
- Include climate change education and eco awareness across the curriculum

Collegiate

- Create a nature/wellbeing area for outdoor lessons/ chill-time/ homework zone
- Raise awareness of the climate agenda through senior leaders' input
- Establish a grow your own gardening club to provide food for the canteen

Cotham

- Get rid of plastic bottles on the school site
- Investigate urban gardening to grow food for the canteen
- Meet with the school leadership team to discuss climate challenge plans

Fairfield High School

- Create a slide on how to reduce waste to present to staff
- Develop slides for use in all subject areas with meaningful information about the environment and climate change
- Define "We Are Fairfield" to include environmental priorities

Orchard School

- Plant trees around the school site
- Leave some areas of the school grounds un-mowed to encourage wildlife
- Introduce litter picking for people with detentions

QEH

- Reduce food waste
- Organise waste systems better
- Create green areas inside and out

Redmaids' High School

- Organise an environmental discussion group to be run by sixth form students for younger students
- Hold a vegan bake-off
- Investigate the installation of solar panels on the school site



Concluding comments

BEP's Towards Net Zero Event was a day of positivity and purpose for all involved. It was fantastic to see so many engaged, passionate students and staff sharing their environmental ideas and aims through a wide range of activities. Students and staff across BEP schools should feel so heartened by the changes they have already initiated. I hope that, inspired by the day, they are able to take even bigger strides towards meeting their environmental goals.

Marie Tamblyn, Redmaids' High School



“
I'd like to say a huge thank you to you all. It's clear Bristol is doing so much as a community, and it's inspiring to the rest of the country. I was blown away talking to your school leaders, and hearing how much they care about the students and the planet. It gives me a huge amount of faith”
*Jonathan Clear,
Chief Sustainability Officer,
Department for Education*

Bristol Education Partnership is grateful to the Comino Foundation and to Burges Salmon for their support for our work.