



Future Play Design Challenge 2022

Children's perspectives on sustainability, UK

1 February 2022

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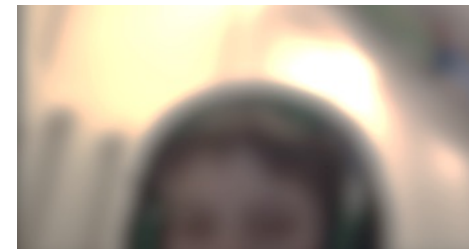
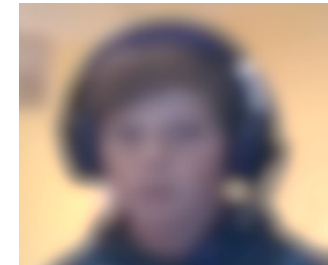
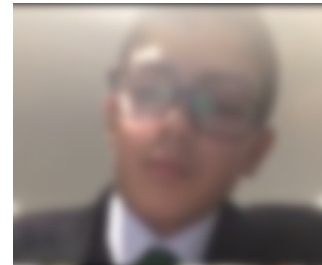
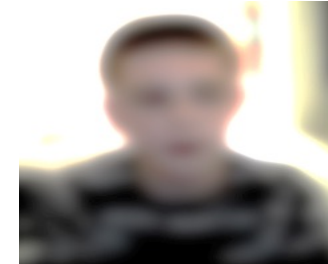
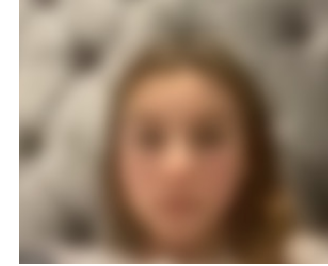
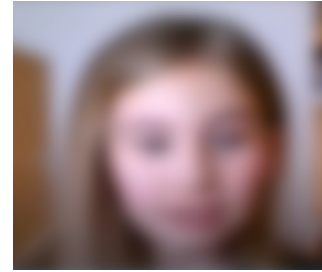
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Background and Objectives

- CoC Playful Minds has, supported by LEGO Ventures, launched a global design challenge for entrepreneurs in play and learning in January 2021. The theme was 'Digital Play' and the winner was announced in April 2021.
- The purpose of the Future Play Design Challenge is to encourage and inspire entrepreneurs to exercise ethically and socially responsible involvement of children and young people in co-creative design activities. The winner receives a personal mentorship with CoC Playful Minds and LEGO Ventures, with help to build competencies and mature the concept in co-creation with children.
- This year, 2022, the theme will be Sustainability.
- CoC Playful Minds asked Family Kids and Youth to carry out focus groups with 9-12 year olds to explore their knowledge of and attitudes towards sustainability and climate change.
- Results have been used to help build the background and objectives for the launch of the Future Play Design Challenge 2022, 1 February 2022 – and to inspire participants in the challenge with children's voices.

What we did...

- We carried out research with two groups of UK children between 8th – 9th December 2021
 - 1x group of girls aged 9-10
 - 1x group of boys aged 11-12
- Groups were held online, and were filmed with permission from the child's parent/carer, and from the child
- This presentation includes film, but to conform with GDPR this must not be shared with any 3rd party



Key Findings

- 'Climate change' is a term all children in the groups are familiar with, although 'sustainability' is less used by the younger group of girls, aged 9-10
- Much of their knowledge and understanding about sustainability is learnt at school, but additional sources such as broadcast news, social media, and family members contribute to their knowledge as well
- Girls (9-10) in the group are very concerned about wildlife and animal suffering due to climate change; boys (11-12) are focused more on the way renewable energy can help to protect the planet

Key Findings

- Deforestation is another important topic for the children, with an understanding that it can lead to more pollution and higher levels of carbon dioxide.
- Using paper is thought to be very wasteful and outdated when there are new technologies available that do not require paper at all
- The children believe that businesses should become more environmentally friendly. It is thought, for example, that Amazon creates a lot of paper waste, and their delivery trucks cause pollution. Having electric vehicles could solve the problem

Understanding Sustainability and Climate Change



Understanding of terms varies by age

- All children we spoke to are aware of climate change
- However, girls aged 9-10 are less familiar with the term 'sustainability', whereas older boys aged 11-12 are much more clear on their definitions of both 'climate change' and 'sustainability'
- Previous knowledge of these terms does not impact how either group feel about the topics – both groups believe people should work together and do more to protect the planet

Climate change: "It kind of means the weather, the heat and stuff like that. I'm not really sure"

Girl, age 9-10

Sustainability: "I think it means it needs to be stopped, or get help. It can't be all the time"

Girl, age 9-10

Climate change: "Increase or decrease [in] the average global temperature"

Boy, age 11-12

Sustainability: "Paper bags would be sustainable. I guess plastic isn't sustainable because it gets in the ocean"

Boy, age 11-12



Young People and Sustainability

What is Sustainability?



Children are uncertain about the importance of sustainability for other young people their age

- Children are uncertain about how important sustainability would be for others their age, but they do recognise that it is going to become more important for everyone as they get older
- They also understand and can explain how the effects of climate change will become more extreme as time goes on, saying it will become increasingly important to help the planet
- Examples cited include the occurrence of more natural disasters, and a reduction of wildlife

“It is important but isn’t something you constantly think about”

Boy, age 11-12

“Some other countries don’t have the same education system as us, and they might not talk about [climate change], but I can’t say”

Boy, age 11-12

“I don’t think it is that important to people our age, it will be more important when we are older”

Girl, age 9-10



School is where children often learn about climate information

- Learning about these topics in school is often the first place children recall hearing about, and understanding, sustainability – for both groups, this was in UK Year 5 (aged 9-10)
- The older boys (aged 11-12) think they are learning more in secondary school (which starts aged 11 in the UK) – the issue is usually explored in their geography lessons
- Girls appear to talk with parents about the topic more than boys, but the conversations are likely to be focused on the weather, and general information about climate change

“We learn about it a bit in school, about climate change. How some people suffer from climate change, and some people have advantages from climate change”

Girl, age 9-10

“They’re telling us enough [at school] but they’re not shoving it down our throats. It’s still quite interesting to us”

Boy, age 11-12

“Sometimes my mum talks about it when she watches the climate news”

Girl, age 9-10

Children are familiar with climate change activists and influencers

- The children we spoke to are used to seeing content about climate change and sustainability posted on online platforms
- There are influencers such as 'Elissa' and 'Mr. Beast' who the children see posting their thoughts about sustainability through social media platform such like TikTok and YouTube
- Activists such as Greta Thunberg and Sir David Attenborough are also well-known figures associated with climate change
- In everyday life, teachers are often seen as trusted sources of information on the topic

"Her name is Elissa, and her whole channel is about pollution. Near her are these really big bins...she goes up there and finds a lot of good stuff like cabinets, and turns them into new furniture. And she talks about pollution and things like that"

Girl, age 9-10

"She's been all over the news, Greta Thunberg"

Boy, age 11-12

"My teachers, because in our lessons they are trying to teach us how to stop littering and to put it in the bin and not on the floor or in the ocean"

Girl, age 9-10

Not all agree on what is being taught at school

- Some boys (aged 11-12) however voice scepticism about how much they are learning at school
- They are convinced that more information about climate change is available, and think that teachers in many countries are being over-cautious, only talking about certain topics for fear of being criticised or being too political

“[Learning things outside school] helps a bit more - in my opinion schools only voice what they’re allowed to tell us”

Boy, age 11-12

What sort of things are schools not telling you?

“The dark stuff”

Boy, age 11-12

What sort of things are schools not telling you?
“Stuff that could stop them from getting money...things where the government have made money off of something. Not potentially our (UK) government, but a government”

Boy, age 11-12



Information is also seen through TV programmes

- Young girls (aged 9-10) believe that TV is a good source of information on climate change and sustainability
- This can sometimes prompt conversations with parents who have seen the news on issues such as the changes in weather, the effects of pollution, or littering
- Both boys and girls believe current affairs programmes, such as the news, are not usually broadcast at a good time for children their age however – it's often too late - they feel they would know more about climate change if they were able to watch the news

“Sometimes I hear about it on TV programmes. They talk about sustainability. I hear it [Disney show] on Stuck in the Middle, and she talks about sustainability”

Girl, age 9-10



“Maybe if the news could be at times for kids to watch it. Maybe at 4:30 or 5pm, so it doesn't get interrupted by school or dinner”

Girl, age 9-10



Young People and Sustainability

How do you learn about Sustainability?



What more can be done?



Different options are supported

- Children do not believe enough is currently being done to protect the environment, but boys and girls have different ideas of what should be done
- For girls, they agree there should be more people volunteering to keep green spaces and lakes and oceans clean – this would in turn reduce pollution and also keep wildlife safe
- Boys are more concerned about energy creation and consumption
- Several of their ideas focus on renewable energy, including replacing fossil fuels with wind turbines, hydropower, solar power, and nuclear power wherever possible

“There are parks with lakes with rubbish. And I want to go and pick it up, but it is actually really dirty. And it should be clean for the ducks”

Girl, age 9-10



“Instead of using coal power, use solar [power]”

Boy, age 11-12

“Replace all large diesel ships with nuclear powered ones. It’s much better because they release steam, not smoke”

Boy, age 11-12

Deforestation is an issue boys and girls agree on

- Both groups are highly concerned about deforestation and feel there are too many trees being cut down without being replaced
- The impact of deforestation is well known; the children discuss air quality and how it can make people seriously ill
- They also know people can be incredibly wasteful when it comes to using up paper and think this practice needs to stop



“With deforestation, trees take in CO₂, and produce O₂. Take away the trees, you’re stuck with carbon dioxide, not oxygen”
Boy, age 11-12

“We should try to stop cutting down trees”
Girl, age 9-10

“People should stop cutting down trees, because people don’t even use all of the paper before they get a new [piece], and it is a waste”
Girl, age 9-10

Businesses need to do their part

- From a business standpoint, companies such as Amazon are mentioned as being less than eco-friendly
- Children complain that the company can often be wasteful when using large amounts of packaging for small items
- Boys in particular are concerned about Amazon using too much fossil fuel to make deliveries, when instead they could be using electric vehicles
- As an alternative, they suggest companies like Tesla should work with delivery drivers to make more electric vehicles
- This way, there is less pollution from delivery vehicles using fossil fuel

“Sometimes at Amazon they send you really tiny things in big boxes, and they are wasting the packages”

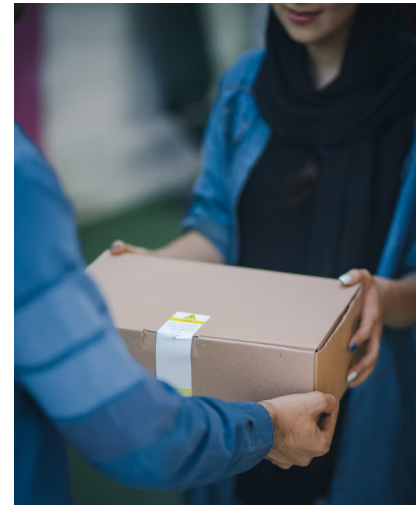
Girl, age 9-10

“Amazon, when you order something, most delivery companies, they use diesel or petrol, they don’t really use electric cars”

Boy, age 11-12

“Something Tesla could do, they could make cheaper or maybe even free cars for Amazon because that’s stopping some pollution from delivery trucks”

Boy, age 11-12





Young People and Sustainability

Sustainability for businesses



Children's message to adults – why should you be sustainable?



Proper recycling is needed

- Children are critical of adults' ability to protect the planet, although they acknowledge that adults are better at being sustainable than children their age
- They would like adults to understand the importance of bins for rubbish. They feel more bins are needed to prevent littering and encourage more recycling – therefore protecting animals and the environment
- The amount of littering that occurs must be also reduced. There is currently too much plastic in the ocean and more needs to be done (e.g. fines) to prevent people from dumping their rubbish anywhere

“We’re the ones going into the world [adults] designed”
Boy, age 11-12

“You need to put your rubbish in the correct bins so it goes to the correct place. Because if it is in the wrong place it could be even worse for the environment”
Girl, age 9-10



Animals need to be protected and fossil fuels eliminated

- Wildlife is important to children and they would like adults to understand wildlife is threatened when the Earth is polluted
- Areas like the Arctic circle are home to animals such as Polar Bears, who are running out of places to live because their natural habitats are slowly decreasing
- Sustainable energy is the way of the future – it is considered better for the environment and does not cause air pollution like fossil fuels – and they are aware that some efforts are being made to become sustainable
- Adults should know that using alternatives to fossil fuels (e.g. hydropower, nuclear power) can and should be used as an alternative

“I know there are some sort of companies out there that are making...power from water”

Boy, age 11-12

“Some of the animals that live in the arctic and Antarctic don’t have a place to live. Like polar bears, maybe penguins. It doesn’t only happen there”

Girl, age 9-10



Modern inventions can help fight climate change

- New methods for transportation are thought to be better for the environment overall, and trees should not be cut down for the use of paper products
- Having alternatives to diesel fuelled cars and airplanes could make a positive impact environmentally
- It is thought that technology is taking over the need to use paper for writing altogether
- New inventions (making paper from stone) are being used, so there should be less of a need for trees to be cut down

“Rather than wasting trees, they are making paper out of stone, so it is better for the earth, so it doesn’t use up oxygen”

Girl, age 9-10

“People need to stop using cars so much if they are driving really close, you can just walk there”

Girl, age 9-10

“I think we should make planes...electric. [They could] take in the air, and that’s what powers the plane”

Boy, age 11-12

“I wouldn’t really say we need paper. We can text, we can send emails, we can write a word document. And then we save it and it’s like saving paper in a book”

Boy, age 11-12



Young People and Sustainability

Why should you be sustainable?




Output from Weekend Ethnographic Task

Use energy efficient light bulbs and remember to turn off when not in use or leaving the house or going to bed.

Fky B101
Target Group: Boys 11-12
Task: Climate Change and Sustainability


+ Tag + Notes



12 Dec 2021 · 17:03
Protect out trees and plant new ones when we can to protect the environment.

Fky B101
Target Group: Boys 11-12
Task: Climate Change and Sustainability

+ Tag + Notes




12 Dec 2021 · 16:04
Closed doors extra insulation to keep heat in and cold out

Fky B112
Target Group: Boys 11-12
Task: Climate Change and Sustainability

Target Group: Boys 11-12
Task: Climate Change and Sustainability


+ Tag + Notes



12 Dec 2021 · 17:06
Use the shower instead of baths to save water.

Fky B101
Target Group: Boys 11-12
Task: Climate Change and Sustainability

+ Tag + Notes



12 Dec 2021 · 17:00
Recycle all plastic containers and packets.


Fky B101
Target Group: Boys 11-12
Task: Climate Change and Sustainability

+ Tag + Notes

Don't leave rubbish in fields and the open and always use bins.

Fky B101
Target Group: Boys 11-12
Task: Climate Change and Sustainability


+ Tag + Notes



12 Dec 2021 · 17:04
Recycle all paper and cardboard and reuse paper where you can.

Fky B101
Target Group: Boys 11-12
Task: Climate Change and Sustainability


+ Tag + Notes



12 Dec 2021 · 16:06
Open curtains for natural light and access to window for fresh air to not waste electricity

Fky B112
Target Group: Boys 11-12
Task: Climate Change and Sustainability

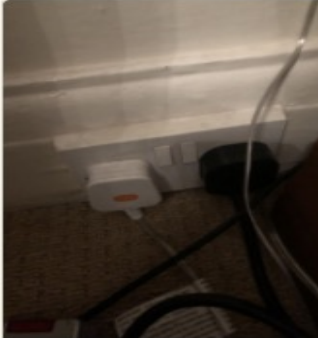
+ Tag + Notes



12 Dec 2021 · 17:07
Make sure you turn taps off so you don't waste water and reuse water to feed plants etc.

Fky B101
Target Group: Boys 11-12
Task: Climate Change and Sustainability


+ Tag + Notes



12 Dec 2021 · 17:02
Remember to turn off all sockets at night to save electricity.

Fky B101
Target Group: Boys 11-12
Task: Climate Change and Sustainability

+ Tag + Notes



Some children taking part in the groups were asked to keep an ethnographic diary of their observation and thoughts about sustainability over the weekend of December 11th and 12th 2021.

Many posts were uploaded to our ethnography app – these included 26 pictures and 13 notes!

Children were keen to show us things they do around their home/neighbourhood that are good for the environment

They were also clear about what they would tell adults about the environment, and what they think they should do about pollution and climate change

Things you do around your home or neighbourhood that are good for the environment





“Don’t leave rubbish in fields and the open and always use bins”
Boy, age 11-12

“We recycle batteries at recycling points”
Girl, age 9-10



“We collect our old batteries and recycle them in supermarkets”
Girl, age 9-10



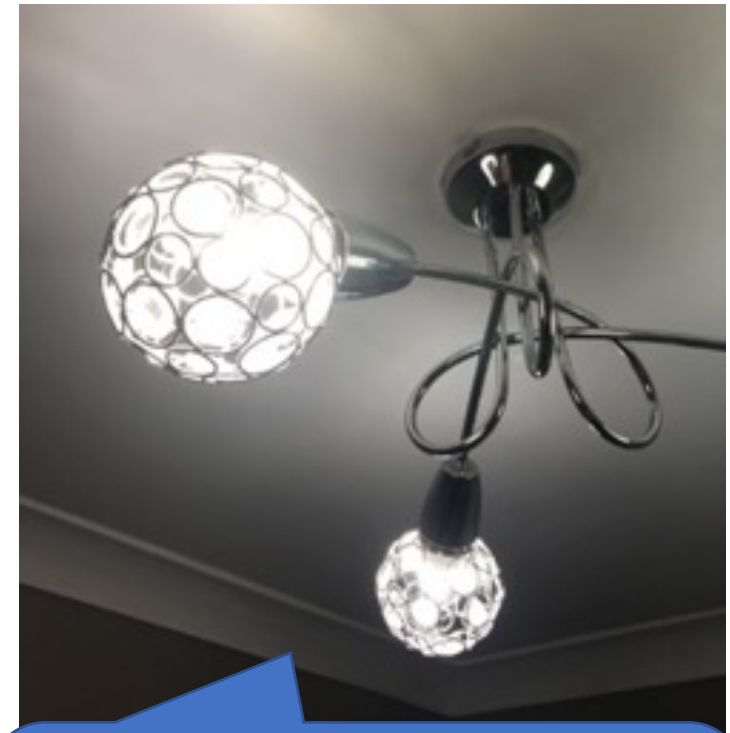
"We recycle as many items as we can"

Girl, age 9-10



"Recycle all plastic containers and packets"

Boy, age 11-12



"Use energy efficient light bulbs and remember to turn off when not in use or leaving the house or going to bed"

Boy, age 11-12



“We try and use our water bottles rather than buying water in bottles”

Girl, age 9-10



“Make sure you turn taps off so you don’t waste water and reuse water to feed plants etc”

Boy, age 11-12

“Open curtains for natural light and access to window for fresh air to not waste electricity”

Boy, age 11-12

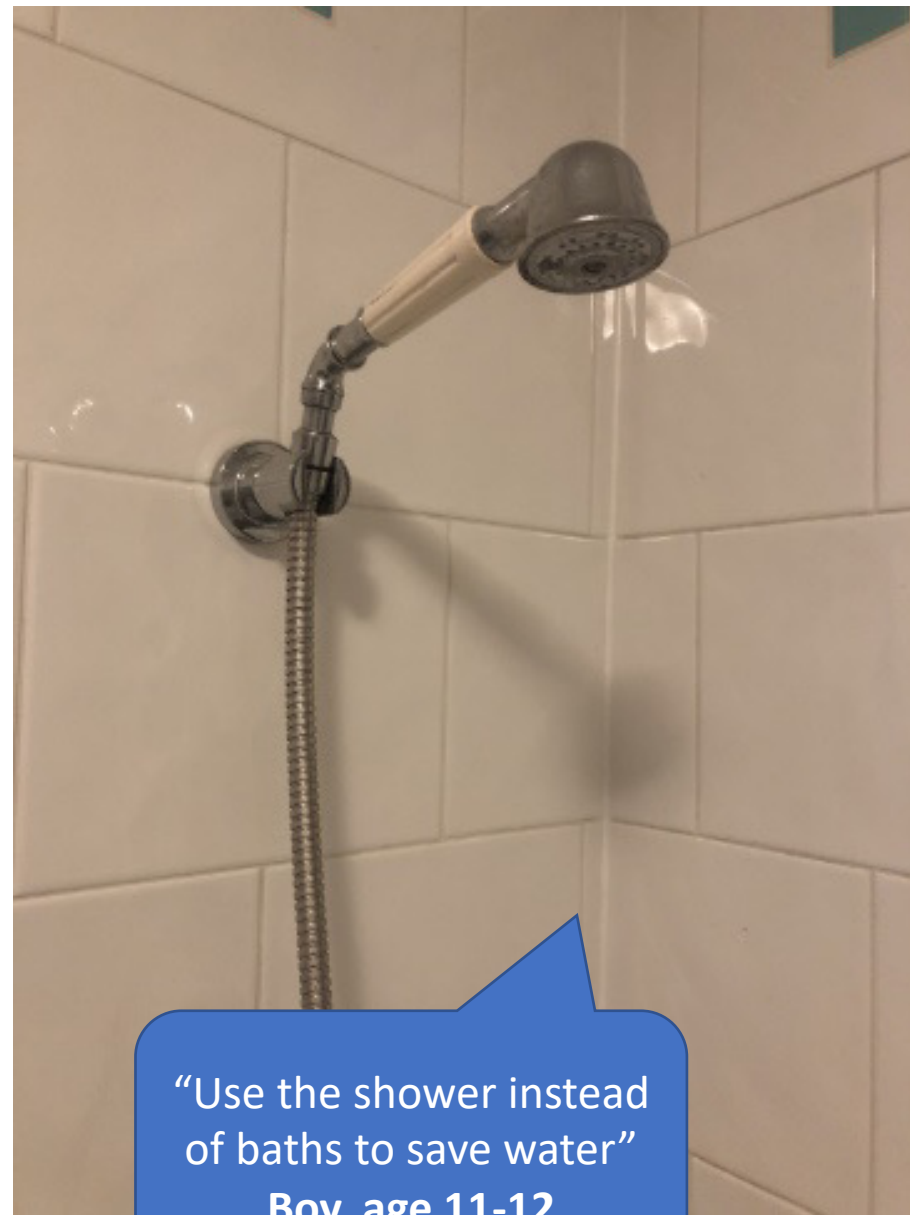


“Climate change can be helped if people of all ages help out by putting their rubbish in the correct bins and using their cars less”
Girl, age 9-10

“My mum puts our sandwiches in plastic boxes that can be washed or this reusable wrap, we try not to use cling film”
Girl, age 9-10



“Use the shower instead of baths to save water”
Boy, age 11-12



“Every day in my house we sort
our rubbish into recycling -
glasses and stuff, paper and
cardboard and then rubbish too”
Girl, age 9-10



“Protect our trees and
plant new ones when we
can to protect the
environment”
Boy, age 11-12





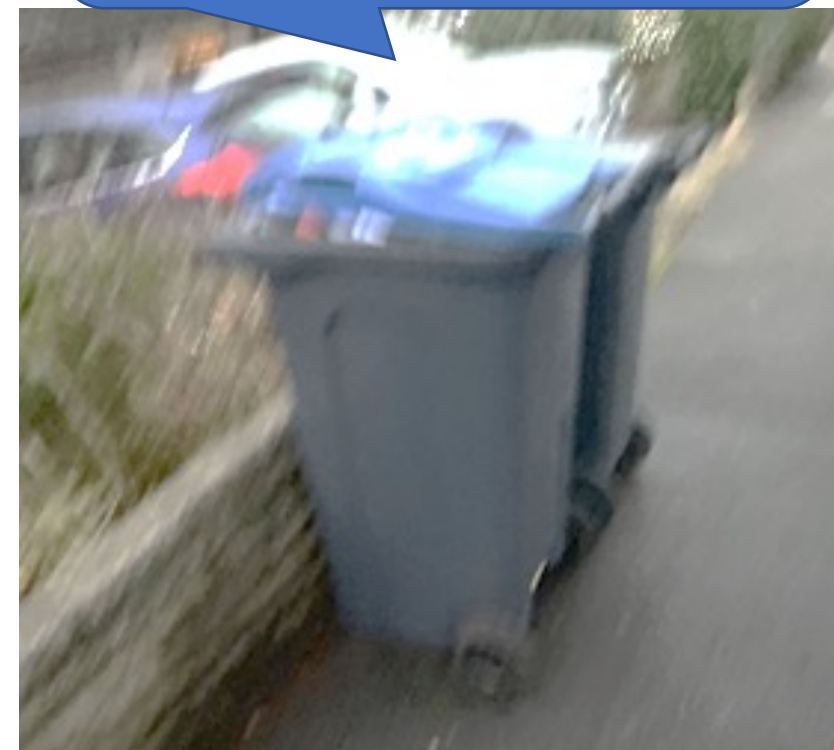
“Smart meter to measure gas, water and electric used to see how much has been used to save money and reduce gas, water and electric”

Boy, age 11-12

“Closed doors, extra insulation to keep heat in and cold out”
Boy, age 11-12



“Recycling for recycling plastic, cardboard and paper”
Boy, age 11-12



“I use a recycling bin instead of a normal bin for plastics and any recyclable things”

Boy, age 11-12



“Large compost heap for composting and a composting bin. Vegetable patch for plants and vegetables and fruits

Boy, age 11-12



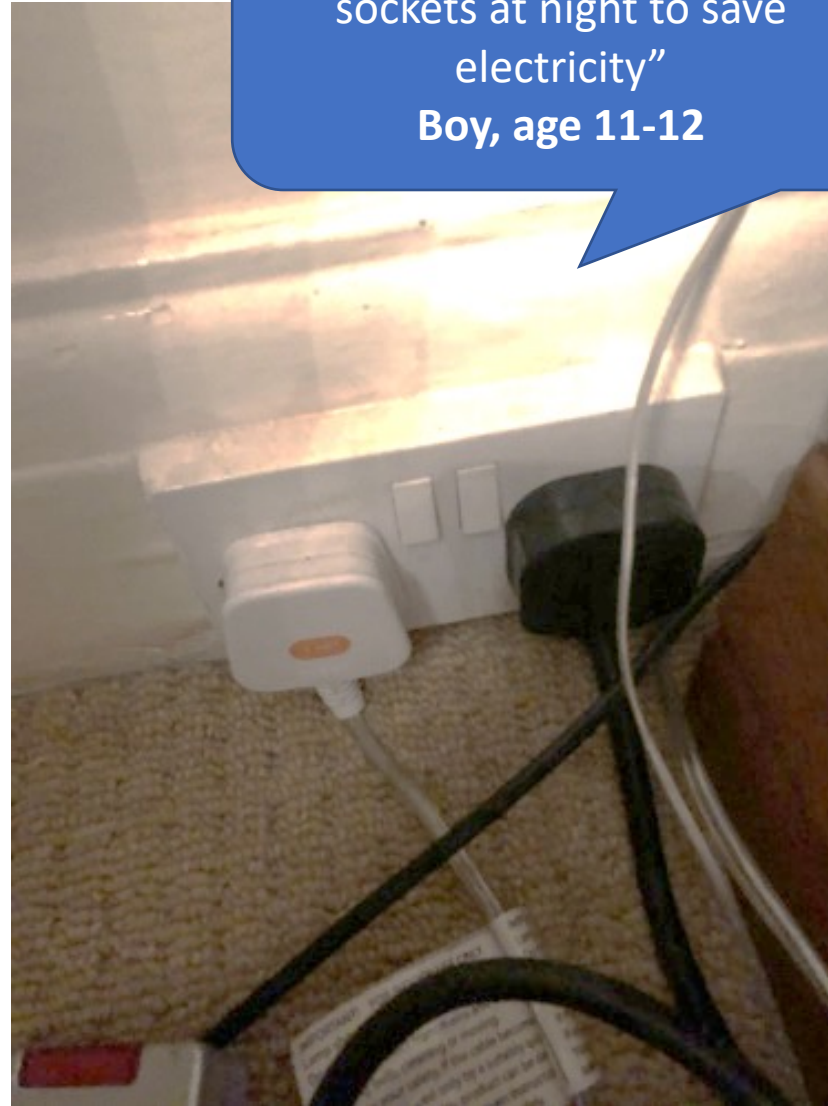
“Recycle all paper and cardboard and reuse paper where you can”

Boy, age 11-12



“Remember to turn off all sockets at night to save electricity”

Boy, age 11-12



If you were to talk to adults about climate change or sustainability, what would you tell them?



“I would tell them to work on things such as making all vehicles electric so it would cut down the fossil fuels. As if we have things such as electric cars it would cut down a lot of the fossil positions”

Boy, age 11-12

“If I spoke to adults about sustainability I would tell them to recycle more so the environment gets better. I would make people order more recycling bins so they could recycle more. Try and use your own coffee cup rather than the ones from the shop that get thrown away”

Girl, age 9-10



"I want adults to do all the things we already do as a family and more to help the environment. Recycle as much as you can, not waste stuff. Think about using a eco waste van where you take an old bottle and fill up the stuff you need like filling up liquid and shampoos"

Girl, age 9-10



"I would like adults to work on electric vehicles and other sources of power that do not hurt the environment"

Boy, age 11-12



“Invest more in environmentally friendly energy supplies such as hydra-power, wind and solar”

Boy, age 11-12



“I would like adults to help out by turning lights out when they leave the room, turning taps off when they aren’t using them and using their cars less so they aren’t making air pollution”

Girl, age 9-10

When you hear the word ‘pollution’ what do you think of?



“When I think of pollution it makes me think of dead animals. The animals are dying because of all the plastic and stuff in the sea”

Girl, age 9-10



“I think of the pollution in the air and in the ocean. As well as the animals dying in the ocean because of pollution”

Boy, age 11-12



“When I hear the word pollution I think of people throwing their rubbish in the oceans and people putting their rubbish in the wrong bins so it goes to the wrong places and doesn’t get recycled properly”

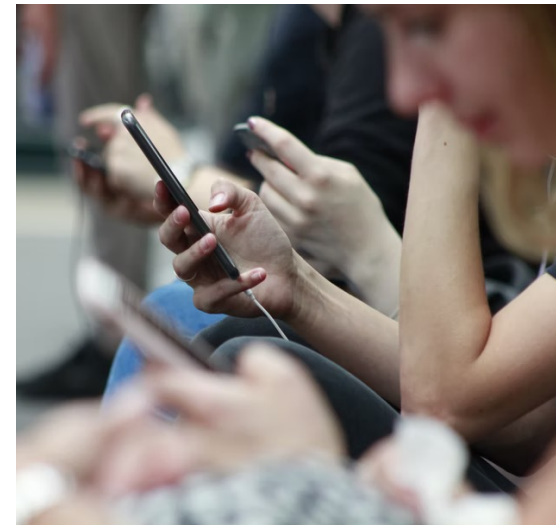
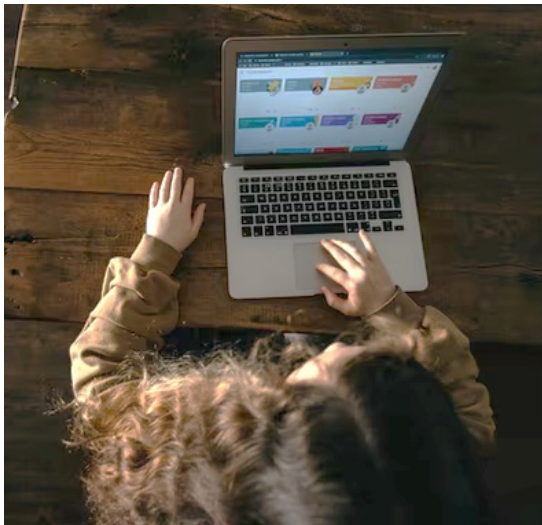
Girl, age 9-10

“The word pollution to me, it makes me think of horribleness, unhealthiness, sick, death darkness. It just isn’t right”

Boy, age 11-12



Do you know of any memes, film clips, apps, TV programmes, or other information that tells you about these topics?





"I hear it mainly from school but also from YouTubers such as Mr beast as he promotes team seas and planting 20000 trees"

Boy, age 11-12

"I really enjoy watching nature programmes such as David Attenborough's nature documentaries and National Geographic programmes. They often talk about climate change, rainforest destruction and the chance of a 6th mass extinction"

Boy, age 11-12

"My sister has a Peppa Pig book about recycling that my mum reads to her. At school we learn about recycling. I watch a programme called 'Stuck in the Middle' and the girl uses old stuff to make inventions. It's really good"

Girl, age 9-10

"I watch Newsround [BBC children's news programme] to find out about this"

Girl, age 9-10

Summary and Conclusions



Summary and Conclusions

- 'Climate change' is readily understood by our 9-12 year olds in the groups, although 'sustainability' may be a less familiar term for the younger children (9-10)
- The issues of sustainability and climate change are learnt at school, but sources such as broadcast news, social media, and family members contribute also
- A few of the boys feel their education is not adequate in teaching all there is to know about sustainability. There is concern that schools may only teach about topics that are not controversial
- Girls are especially concerned about wildlife and animals suffering due to pollution and climate change – they believe more effort is needed to protect their environments
- Boys are focused more on how renewable energy can help protect the planet. They speak frequently about the use of solar or electric power to operate vehicles and heavy machinery, rather than fossil fuels
- Both groups agree that cutting down trees is damaging for the environment
- They are especially concerned that deforestation is leading to more pollution and higher levels of carbon dioxide. Using paper is thought to be very wasteful and outdated when there are newer technologies that do not require paper at all

Summary and Conclusions

- Children believe businesses should become more environmentally friendly, especially adopting the use of electric vehicles for deliveries
- Children demonstrated a number of ways they practice sustainability in everyday life
- Making sure to recycle and put waste in the correct recycling bin was frequently shown on their weekend ethnography app
- They are conscious of how much water and electricity they are using, and explain why using energy-efficient lightbulbs, or taking showers rather than baths, can help the environment
- They have strong images in mind when it comes to thinking about pollution. Images of plastic in the oceans and its impact on animals is a common thought, and they can become quite distressed by this
- They believe strongly that adults must become involved in helping the planet. Children who posted on the ethnography app said they would like to all adults to be aware of the importance of recycling and using electric vehicles as much as possible
- Beyond school, children learn a lot about climate change and sustainability from what they see online. YouTubers like Mr. Beast and programmes by Sir David Attenborough are popular sources of information on sustainability

Thank you!

1 February 2022

Prepared by Family Kids & Youth

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