

Students as Change Agents Summer '21

“How might we equip young people from all backgrounds with the skills they need to tackle the climate crisis?”

June 2021

Apps for Good

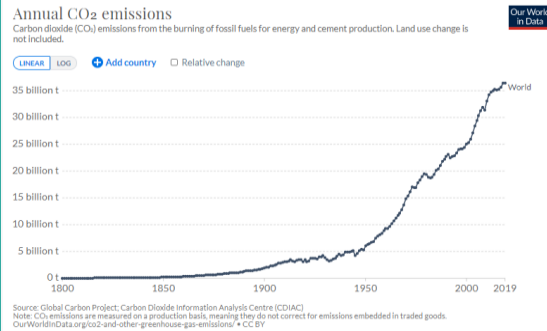
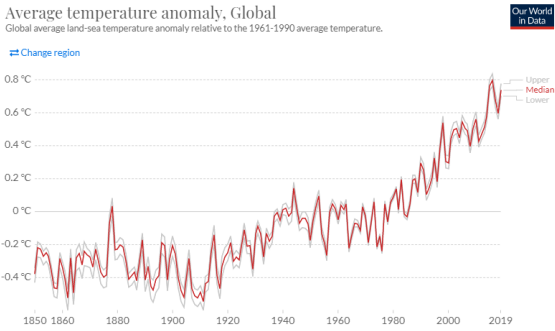
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What problems are we facing?

The climate crisis

Source: Hadley Centre via ourworldindata.org

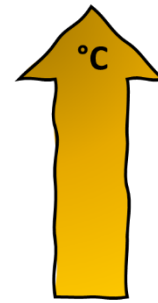


The Earth is heating up and it's clear that our CO₂ emissions are driving this. Action must be taken – but what kind? What skills must be taught?

The choices we face

As greenhouse gas emissions rise to keep up with our modern lifestyles, so too do the impacts we are beginning to face and will face in the future.

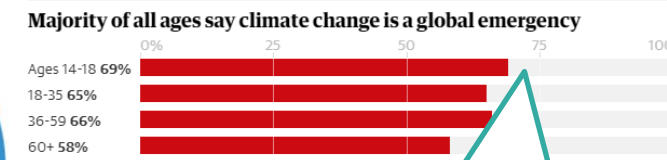
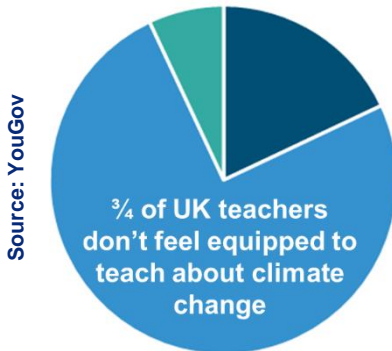
Limiting the temperature increase of Earth to 1.5C is the best outcome, and allowing it to increase to 3-4C will undoubtedly lead to severe global impacts. These will be felt by the youngest generation the most.



- * Adaption highly questionable
- * Heat waves
- * Global mass extinctions
- * Amazon dieback
- * Risks to regional food security
- * And more

Source: World Wildlife Fund

Are young people aware and prepared?



Source: "People's Climate Vote", UNDP

Young people are the most concerned age group



41% of UK 8-16 year olds don't trust adults to tackle the challenges of climate change
Source: BBC Newsround survey

Youth groups such as Fridays for Future Scotland, UK Youth Climate Coalition, School Strike for Climate, and SustainUS prove that many young people want to be involved in climate action – it is important to equip them with the necessary skills for the future

Changing economy



The world is changing quickly, with green energy use steadily increasing year by year and new technologies and practices emerging. The International Renewable Energy Agency (IRENA) reported green energy jobs showed continued growth to 11.5 million worldwide in 2020. This will only continue to increase.

Meanwhile, careers involving carbon neutral/negative technology and food production, and sustainable architecture will become more prevalent.



Preparing for the effects of climate change is arguably equally as important as reducing our emissions – A 2020 survey of 800 cities around the world, carried out by the Carbon Disclosure Project, found that approximately 43% didn't have a plan to adapt to the ongoing climate crisis. The truth is, we need a generation of people ready to tackle these problems

**1 in 4 cities
can't afford climate
protection measures**



A report by the UK government on the green economy outlines the following skills:

1. Skills supporting resource efficiency (reduced waste, improved efficiency)
2. Skills supporting low carbon industry (nuclear and renewable energy training, reduced emissions)
3. Skills supporting climate resilience (interpreting climate change projections, retrofitting technologies)
4. Skills to manage natural assets (understanding environmental impacts, land use planning)

Source: "Skills for a green economy", HM Government report

Which skills?

We suggest the following categories of skills be taught to young people:



Conservation



Sustainable living



Future green skills



Engaged citizenship

Our pitch

“Climate Club” - for want of a better name

*“The voice of the people is clear – they want action on climate change”
Cassie Flynn, the UNPD’s strategic adviser on climate change*

Outside the confines and rigidity of a mandatory lesson within the school day, we propose an afterschool club in which teenagers can learn more about the climate crisis, how they can enact positive change, learn important skills for combatting climate change, to reduce their impact on nature, and for a greener economy in the future.

Conservation skills



- ✦ Tree-planting
- ✦ Litter hikes
- ✦ Build a compost bin
- ✦ Create a pollinator habitat
- ✦ Establish a wildlife pond
- ✦ Helping conservation projects worldwide e.g. fundraising

Sustainable, low-carbon living



- ✦ Conserving heat, electricity, water
- ✦ Reducing food waste
- ✦ Low carbon diets
- ✦ Green transport
- ✦ Bicycle workshop/road safety
- ✦ Greenwashing awareness
- ✦ Reducing disposable waste
- ✦ How to teach others effectively
- ✦ Green banking and sustainable spending

Green skills for the future

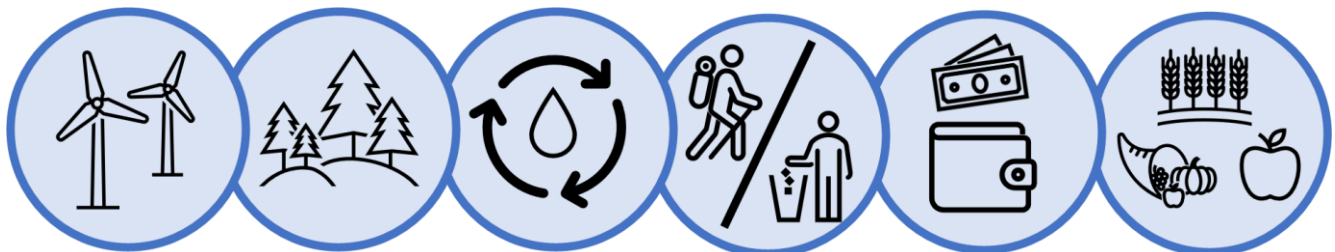


- ✦ Installing solar arrays
- ✦ Building wind turbines
- ✦ Growing + preserving food
- ✦ Filtering water
- ✦ Career talks: green architecture, agriculture, energy, etc.
- ✦ Carbon capture
- ✦ Water cycle, carbon cycle, soil formation

- ✦ Letter-writing, petitions, activism
- ✦ Knowing about emission reduction goals and holding governments accountable
- ✦ Community work, volunteering
- ✦ Developing world, indigenous people + climate change



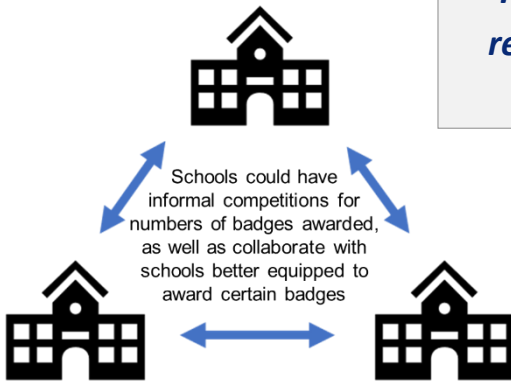
Everyone loves badges and stickers. They’re fun and rewarding to collect, and they provide an incentive to try new activities and learn new skills. We propose a badge system where club members earn (physical or virtual) badges based on different climate crisis/environmental workshops, classes and projects. Some mock-up designs of potential badges are shown below:



The badge system would provide the programme with modularity, allowing each skill or activity to be focused on one at a time. It would allow content to be delivered to teachers/instructors in packages, and local experts, industry collaborators etc. could be brought into the classroom or provide online workshops for relevant badges.

“You might think that we are too young to know about the risks and realities of climate change. But we see its effects in our daily lives.”

- Gertrude, 16, Tanzania (Source: UNICEF)



Measuring success

Short term

Numbers and types of badges awarded

Long term

Future degree choices (STEM/sustainability), green attitude surveys at different timepoints



In the future, an archive of suggested classes, worksheets, challenges, videos, industry contacts, region-specific volunteer and work experience opportunities – as well as the badge system - could be accessed by any teacher who wanted to provide the programme content to schoolchildren via Apps for Good.

What challenges are expected and how could these be tackled?

Young people’s contributions are essential to advance low-emission, climate-resilient development for the future. The following possible challenges and recommendations have been identified as key for the successful implementation of the proposed project.

Challenge	Solution
Funding and resources	<ul style="list-style-type: none"> • UK Climate Action Fund - funding • Scottish Government Climate Challenge Fund – funding & resources • Transform Our World – free online resources
Accessing and engaging youth from all backgrounds	<ul style="list-style-type: none"> • Make use of Apps for Good’s existing network of schools (~700 across the UK) • Engage and collaborate with youth centres and clubs e.g. The Creative Youth Network and UK Youth • Ensure gender mainstreaming throughout the project
Young people find global-scale concerns such as climate change “distant, abstract, and intimidating”	<ul style="list-style-type: none"> • Foster local solutions by framing the climate crisis and its solutions at a more local and community level to ensure young people connect • Promote a youth-led project for youth to increase their knowledge of climate change and inspire them
Sustainability, efficiency and longevity	<ul style="list-style-type: none"> • Engage young people in finding local solutions to climate challenges • Train youth through training of teachers (ToT) so that they, in turn, engage other young people and tackle issues together • Collaborate with pre-established youth centres/hubs and organisations like the UK Youth Climate Coalition so as to ensure sustained climate action