

## Connecting the Climate Challenge

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### Keywords

*Climate change,  
school  
engagement,  
student-led  
research, arts  
practice,  
documentary*

### Context

Connecting the Climate Challenge is an initiative of Engage Nepal with Science in partnership with Tribhuvan University (Nepal), Teach for Nepal and the Midlothian Council.

Engage Nepal with Science (a collaboration between the Wellcome Centre for Cell Biology/University of Edinburgh, UK and the Research Institute for Bioscience and Biotechnology, Nepal) aims to empower and build confidence in STEM and arts practice, crucial to promoting critical thinking and to understanding the world around us – key attributes to make informed decisions, create a fairer/more inclusive society and to foster positive social change. With the climate crisis constituting the most pressing social and ecological challenge the world is currently facing, this project aimed to educate and inspire climate action.

Connecting the Climate Challenge is a project that pairs primary and secondary schools in Nepal (a country truly impacted by climate change but not as developed in terms of green behaviours) and Scotland (a country dedicated to taking measures to slow climate change down, but not so obviously affected by it). These communities, with different but complementary experiences to climate change, were invited to learn from each other's lived experiences and join forces to tackle the climate crisis and become responsible, global citizens, while building long-lasting bridges between their communities.

The project works with 10 schools in Scotland (covering Northern, Eastern and Western climatic zones, including remote island regions) and 10 schools in Nepal (covering the three main climate areas: Himalayas, hills/valleys and the tropical region). Schools were identified as the primary target audience as they act as excellent entry points to the wider community.

The project started in March 2021 as part of the British Council's Creative Commissions programme and secured funding to run for five years. Since the beginning of the project in April 2021, students have been performing parallel pupil-led research as part of their eco-committees – testing air and water pollution, CO<sub>2</sub> levels, temperature, rainfall, doing litter analyses and assessing biodiversity to create their action plans for taking environmental action. At the beginning of 2022 the project also secured funding from Eurofins Foundation to expand the work to more communities in Nepal.



*Eco Committee, Action Climate Convention, Nepal*

*Image © Alba Abad*

## **Process and outputs**

The aims of the project are to tackle climate change through student and community leadership, encouraging participants to acquire a positive and open attitude towards environmental and sustainability issues. Students (in conjunction with their communities) conduct experiments, collect data, create short films and sustainable artwork to raise awareness of environmental issues resulting in climate change. This is an interdisciplinary project involving art, maths, digital technologies, science and media as platforms to educate, empower, raise awareness and problem solve, not only working across multiple geographies, but also involving multiple sectors –

working with teachers and educators, environmental researchers, artists and filmmakers.

Alba Abad is a biomedical researcher at the Wellcome Centre for Cell Biology, University of Edinburgh and Founder and director of Engage Nepal with Science. Alba coordinates the project and manages the collaborations (including artists in Nepal: Srijanalaya and Scotland: Neil Bratchpiece, Comic Book artist and filmmakers: Into Film and Chapproma studios), designing the educational materials, helping with the analysis and interpretation of the data and promoting the outcomes of the project. Alba presented the outputs of this initiative and showcased the documentary at different events: COP26, Live at COP26 MOOC, International Conference for Bioscience and Biotechnology 2022 (Nepal), 47th International Congress on Science, Technology and Technology-based innovation (Thailand) and Al Sidr Environmental Film Festival (Abu Dhabi).

Other project partners include:

**Chhatra Mani Sharma** – Professor at the Central Department of Environmental Science at Tribhuvan University, Nepal. Bibek Kandel, biotechnology graduate from Kathmandu University and Teach for Nepal fellow (teacher).

**Donna Hanley**, primary school teacher/Eco Committee teacher/Science Lead at the Midlothian Council.

**Sarah-Jane Judge**, Public Engagement Manager of the Wellcome Centre for Cell Biology.

The outputs of the collaboration included:

- Digital collaborations at both teacher and student level between 20 schools in Nepal and Scotland (paired 1:1). The project is now expanding with participating schools mentoring one new school each
- Participants performed parallel environmental measurements to assess pollution levels in air and water, changes in weather patterns, litter and biodiversity through the formation of eco-committees and took environmental action based on their findings, such as tree plantation programs, litter picking events, climate change talks, plastic free initiatives and reuse-recycle programs, among others.
- Participants worked with artists to spread environmental awareness
- A documentary was created in order to have a long-term positive impact on wider audiences, offering solutions to reduce the environmental

impact of humans on the planet. The documentary also gave a voice to people from underrepresented communities in Nepal.

- Two annual prizes awarded for Best Innovative Solutions to Environmental Issues to two schools (for 5 years)
- Students in Nepal also participated in a film-making competition: Camera Sika X Road to COP26 organised by British Council Nepal and Into Film. Three of the partner schools won prizes.



*Captain Climate*

*Image © Neil Bratchpiece*

## **Evaluation and Impact**

As a result of this collaboration, participants learn from each other's lived experiences and work together towards finding solutions to fight the climate crisis and become responsible, global citizens. Thanks to the project, students have been able to experience things first hand, making them more aware of the global implications of climate change through their connections

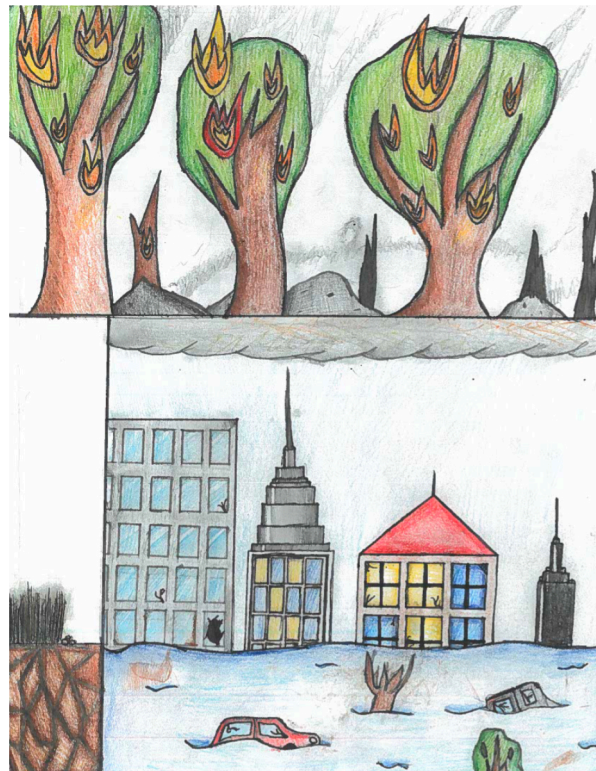
with their partner school and empowering them to become agents of change in their communities. Participants have also worked with artists and produced a documentary to engage broader audiences.

Communities from Nepal and the UK both benefited from the exchange of ideas and experiences, building a bridge between their cultures. Nepalese communities learned about the impact of climate change in their areas and started implementing environmentally conscious and sustainable policies. Scottish communities realised the urgency of change from the Nepali testimonials. The communities also benefited from capacity building, IT equipment/internet access and environmental science equipment provided by the project.

The project leads performed both an internal and an external evaluation. For the internal evaluation, students were asked to do a climate related drawing before and after their participation in the project, in order to demonstrate how their knowledge, attitudes and behaviours might have changed. Students were given the following prompt before starting their drawings: “The world might look different in the future because of climate change. Please draw a picture how you think the world will look in the future”

*How the world will look due to climate change.  
Art student, Scotland*

*Image © Alba Abad*



Drawings from pre- and post-project participation were directly compared and scored in 2 areas: 1) Number of climate change / environmental issues demonstrated in drawing and 2) optimism for the future of the climate.

The results from this evaluation were as follows:

### **OPTIMISM**

**60%** showed a more optimistic view for the future of the climate after participating in the project.

**20%** a less optimistic view

**20%** no change

### **DEMONSTRATED KNOWLEDGE OF CLIMATE CHANGE ISSUES**

**25%** showed an increased knowledge of Climate Change issues in their drawings

The project leads believe that students already possessed knowledge of climate change issues, and the project was key in inspiring them, empowering them and giving them the tools to be able to tackle the climate crisis.

## **Additional Information**

<https://engagewithscience.org/course/connecting-the-climate-challenge/>

[https://www.britishcouncil.org/arts/culture-development/our-stories/  
creative-commissions](https://www.britishcouncil.org/arts/culture-development/our-stories/creative-commissions)

[https://www.eurofins.com/eurofins-foundation/some-supported-projects/  
protecting-the-environment/engage-nepal-with-science-scotland-nepal/](https://www.eurofins.com/eurofins-foundation/some-supported-projects/protecting-the-environment/engage-nepal-with-science-scotland-nepal/)

Srijanalaya (<https://srijanalaya.org/>)

<https://www.intofilm.org/>

[https://www.futurelearn.com/courses/learning-live-at-cop26?utm\\_cam-  
paign=edin\\_bau&utm\\_medium=referral&utm\\_source=online\\_courses\\_  
website](https://www.futurelearn.com/courses/learning-live-at-cop26?utm_campaign=edin_bau&utm_medium=referral&utm_source=online_courses_website)

<https://www.alsidreff.org/>

[https://engagewithscience.org/connecting-the-climate-challenge-the-  
documentary/](https://engagewithscience.org/connecting-the-climate-challenge-the-documentary/)