

June 2023

Lake Superior Living Labs Network
Climate Action Field School Team

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Context:

This report provides a detailed overview of the 2023 Climate Action Field School (CAFS)¹. It describes the development of the CAFS, the people and organizations that supported the program, details about the sessions, with an aim to share what we did and describe how we did it with other individuals interested in hosting similar programs or initiatives.

The 2023 CAFS was a multi-day, collaborative learning opportunity for high school students in grade 12 who were keen to learn more about climate change, climate action, and positive social change in our community (Thunder Bay, Ontario). The program consisted of diverse interactive workshops, discussions with community partners, and experiential learning opportunities. The program was rooted in the head, heart, hands model of transformative education which emphasizes the importance of purposefully and simultaneously engaging cognitive learning (head), affective, and emotional learning (heart), and experiential or embodied learning (hands)². The overall aim of the CAFS program was to empower and inspire youth to co-create a more just, sustainable and healthy future with new knowledge, skills, relationships, and energy. The objectives of the 2023 CAFS are illustrated in the figure below. The CAFS largely took place on the Lakehead University campus; with the Lakehead Climate Action Park serving as a home base.



¹ A CAFS was developed and implemented in 2021 with young adults aged 18 – 30 and in the context of the Lake Superior watershed. The 2023 CAFS is a second iteration of the CAFS program. For more information about this program see: <https://livinglabs.lakeheadu.ca/news-events/climate-action-field-school-e/>

² Orr D. (1992). *Ecological Literacy: Education for a Postmodern World*. Albany, NY: State University of New York.

The 2023 CAFS was co-hosted and supported by the Lakehead District School Board, the Lake Superior Living Labs Network, and by Lakehead University. The Lake Superior Living Labs Network (LSLLN) serves as a platform to connect academic and community partners to increase the impact of sustainability-related teaching, research, and action across the Lake Superior watershed. The LSLLN uses a living labs approach to co-create innovative solutions to sustainability challenges through interdisciplinary and place-based research, teaching, and action. Thunder Bay is the Northern hub of the LSLLN. Thunder Bay is located on the Traditional lands of Fort William First Nation signatory to the Robinson Superior Treaty of 1850.

Also noteworthy, the 2023 CAFS took place at the same time as an international gathering hosted by Lakehead University called the *C²U Expo: Connected Communities. Collective Change*. The CAFS served as a core youth engagement dimension of the C²U Expo. Consequently, participants of the CAFS had the unique opportunity to connect with community champions, community-based researchers, and community engagement professionals that were participating in the C²U Expo.

Core Co-organizers

- Lindsay Galway (LSLLN Thunder Bay Hub Lead)
- Chris Armiento (LSLLN CAFS Assistant Coordinator)
- Matt Roy (Lakehead District School Board; Experiential Learning Resource Teacher)
- Karen Watt (Superior CVI High School; International Baccalaureate Coordinator)

Collaborators

EarthCare Thunder Bay

- Summer Stevens (Sustainability Coordinator)
- Keira Essex (EarthCare Assistant)

Lakehead University

- Paul Berger (Faculty of Education)
- Devon Lee (Sustainability Coordinator)
- Keri Pidgen-Welyki (Greenhouse Manager)
- Gerry Martin (Elder-in-Residence)
- Jason Freeburn (Department of Geography Technician)
- Steven Girvin (Physical Plant Operations Manager)
- Nathan Wilson (Ph.D. Student, Environmental Biotechnology)

Lake Superior Living Labs Network

- Charles Levkoe (Network Lead)

- Rachel Portinga (Network Coordinator)
- Kathryn Milun (Duluth Hub Lead)

Roots to Harvest

- Airin Stephens (Program Director)

Community Members

- Betty Carpick (Multidisciplinary Artist)
- Marcel Bananish Sr. (Indigenous Knowledge)

Field School Planning and Development

Initial planning for the field school started in November 2022 between Matt and Lindsay who discussed the program aims, objectives and possibilities for engaging high school students in Thunder Bay. After several initial meetings, Superior CVI was identified as a partner. Karen Watt, Coordinator for the International Baccalaureate program and Chris Armiento, a participant of the 2021 CAFS, were also brought into the project in December 2022 and January 2023 respectively. Lindsay, Matt, Karen, and Chris formed the core organizing team and met regularly for 6 months to design, develop and plan the 2023 field school. Chris and Lindsay met weekly to facilitate workshop planning, contacting collaborators and organize the logistics of the programming. This was in addition to numerous additional meetings with individual collaborators to plan out the specifics of workshops. All in all, the 2023 Climate Action Field School involved planning contributions from more than 15 collaborators from Lakehead University, the Lake Superior Living Labs Network and community partners in the Thunder Bay community.

To recruit participants and involve them in the planning and design of the field school, the co-organizing team hosted two workshops at Superior CVI, a pitch and a brainstorming session. These sessions are outlined briefly below.

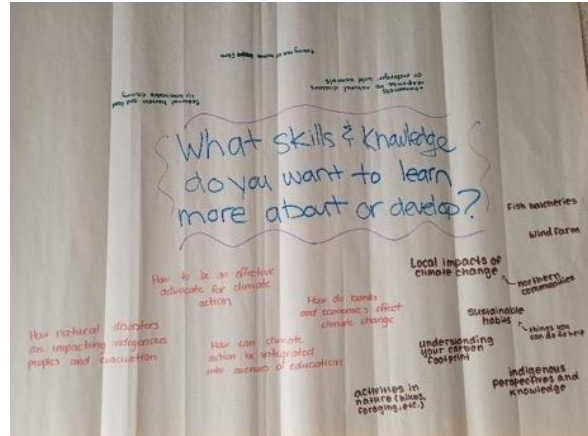
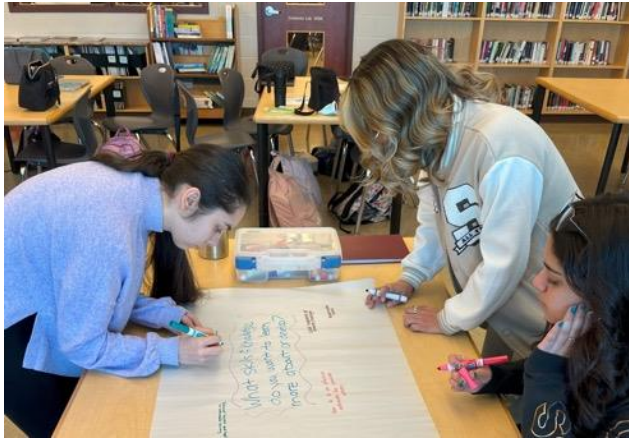
Climate Action Field School Pitch Workshop

To recruit participants for the field school, we developed a workshop to pitch the program and get Superior CVI students excited about participating in the 2023 program. This workshop also served as a chance for participants to ask questions about participation and to get to know us. Lastly, we prepared an interactive learning activity to give participants a feel for the type of experiential learning they could expect to engage in during the field school. An information letter and form were distributed to the students to share and discuss the program with their parents. It also served as a process for identifying those students who wanted to participate and those who may have barriers to participating such as transportation.



Participant Brainstorming Workshop

During this session, all participants who expressed interest in participating in the field school joined us for a brainstorming workshop. We gathered ideas and priorities via small group brainstorming related to three core questions: 1) *What skills and knowledge do you want to learn more about or develop?* 2) *What are your barriers or roadblocks when it comes to learning about climate action?* and 3) *Who do you hope to learn from or work with?* The ideas shared by the students were used to tailor the content of the field school to best suit participants' interests. This workshop also served to engage the students in a meaningful way early in the CAFS program.



The Field School in Action

The CAFS involved 4 days of programming. In the following pages, we describe the content of the 4 days in detail with a description of workshops and sessions, facilitators, and photos.

Day 1

Opening and Lessons for Climate Action from Indigenous Ways of Knowing

Facilitator: Marcel Bananish Sr.

To open the field school in a good way, Marcel (Indigenous Knowledge Keeper) led an opening ceremony and smudge. Marcel shared knowledge and teachings about climate change, climate action, and how Indigenous ways of knowing can inspire us to take good care of each other and Mother Earth. Marcel also shared a song with us.



Orientation to CAFS: Learning Together and Intentions

Facilitators: Lindsay Galway and Matthew Roy

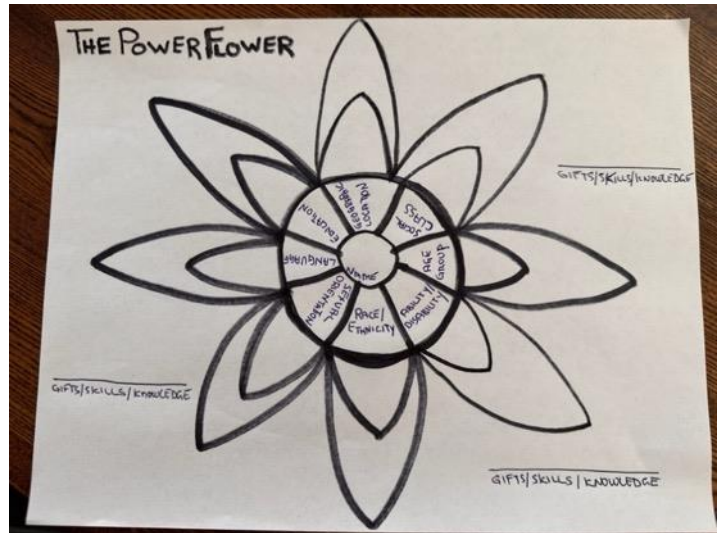
During this session, participants were given a more in-depth introduction to the week, a reminder about our objectives, and an overview of daily sessions. This also gave participants a chance to get familiar with the facilitators. Matt facilitated a brainstorming session for the group to develop a set of assumptions about learning and working together for the week (see below).



Power Flower: Considering Power, Privilege and Gifts

Facilitator: Charles Levkoe

In this workshop, participants received The Power Flower handout. This handout consists of a flower with innermost petals which each list a category pertaining to a person's identity (ex, race, gender, education, age group, etc). Participants then wrote their personal identity on each respective middle petal. Lastly, participants wrote what they believed to be the dominant identity in society for each respective category on the outermost petals. Participants also identified their gifts/skills or knowledge.



In pairs, participants then discussed the components of their identity in relation to what they perceived to be the dominant identities in society. The goal of the activity was to help participants better understand the privilege that they may or may not have in our society and to start thinking about connections between power, privilege, and climate action.



Climate Science Crash Course and Equitable Carbon Budgets

Facilitator: Paul Berger

During this workshop, participants shared and reflected on key questions and concerns they had about climate change broadly. Following this they placed themselves on a continuum in an assortment of scenarios surrounding how well prepared and capable they believed humanity is to handle the climate crisis.

Next, participants participated in an activity to help them better understand and visualize the inequities in carbon consumption per capita of the top carbon emitters. To do this, participants spaced themselves out on a line based on how many emissions the country they were selected to represent emitted, then repeated the activity with how many emissions their country emitted per capita. Participants were then tasked with reflecting on how they would distribute the remainder of the Earth's carbon budget.

Lastly, participants completed an activity to help them comprehend and visualize the greenhouse effect. In this activity, participants layered on a blanket (representing additional greenhouse gasses) to their peer (who represented the Earth) each time they came up with an action humanity conducts which adds greenhouse gas emissions to the atmosphere. Once all the blankets were layered on, their peer confirmed how hot it was getting under all the added greenhouse gasses. Participants then brainstormed how to reduce these emissions and removed a blanket each time they came up with an action that could reduce or remove emissions from the atmosphere.



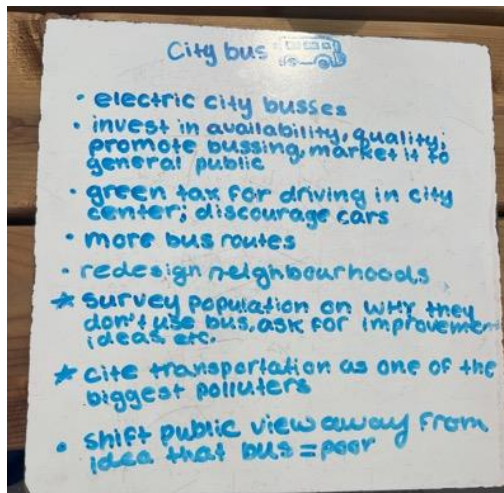
Make Your Mark: Climate Action and Your City

Facilitators: Summer Stevens and Kiera Essex

During this workshop, field school participants received a crash course on civic engagement with a particular focus on how to make change at the municipal level. Participants learned about the different roles of the municipal government and how various departments at The City of Thunder Bay play a role

in climate adaptation and mitigation. Participants then learned about specific examples of youth-led climate initiatives brought before the local city council. Participants also learned about the power of local, community action and how to go about pushing for change in their communities through the official systems.

Finally, Kiera shared key lessons about preparing for and delivering a deputation to City Council, drawing on her experience. Participants worked in small groups to create their own deputation based on a change that they wanted the city to enact. Specifically, participants created their arguments and a mock deputation and shared their ideas with their peers in the style of a formal deputation.



Day 2

Climate Activism and Organizing: Taking Action on Campus

Facilitators: Chris Armiento and Rachel Portinga

This workshop was divided into two parts. The first section gave participants a breakdown of the 10-year divestment movement led by Fossil Free Lakehead at Lakehead University. The presentation covered the history of the group, the actions they took and the response from Lakehead University and the Lakehead community at each step. The main purpose of this section was to give students an overview of a long-lasting activism campaign and to inspire hope that with dedication and perseverance, they too can accomplish their goals.

The second part of the workshop focused on skills that participants would need to run campaigns or actions of their own. After highlighting skills and getting participants thinking about the different aspects of a campaign regarding planning, messaging, media, facilitation and safety, participants were divided into groups to organize a mock campaign. Participants were encouraged to consider all the elements of a campaign that they had just learned about when planning their mock campaigns. Workshop facilitators with experience in running real campaigns then looked at participants' plans and gave them a hypothetical response from the institution they were appealing to. Participants then had to figure out how to adapt their actions and plan around the newly introduced curveballs. Lastly, participants reflected on the questions they had, and the difficulties they faced while planning their mock campaigns. With the facilitators, we worked through these questions in a group setting.



Citizen Science as Climate Action

Facilitators: Nathan Wilson and Jason Freeburn

Nathan and Jason led the group on an interactive walking tour on campus focused on water, climate change and climate action. On the tour, the group had the opportunity to learn about and use water sampling and testing technologies. In doing so they learned about water-related impacts of climate change and priorities related to restoration and management in our community.





Climate Action Park Learning and Opening Event

Facilitators: Devon Lee, Keri Pidgen-Welyki and Gerry Martin

In this two-part activity, participants were divided into 2 groups. In the first half, participants took part in a climate change focused group activity developed and implemented by Lakehead University education students in a climate education course. This served as a learning opportunity for the education students as well as a learning opportunity for the CAFS students.

In the second half, CAFS participants learned from Elder-in-residence Gerry Martin about the significance of plants local to the region. Participants then assisted in the planting of plants they had just learned about in the Indigenous Planting area at the Climate Action Park Site.

Following this, participants had the opportunity to take part in a sidewalk chalk activity before joining the official opening ceremony of the Lakehead University Climate Action Park alongside C²U attendees and members of the wider Lakehead community. This space was designed to be a permanent reminder of Lakehead's commitment to climate action and acts as a space to facilitate those conversations. The ceremony consisted of several key planning members who spoke, explaining the purpose of the park, and the importance for the Lakehead community and thanking those who helped make it possible.



Day 3

Roots Community Food Center – Lillie Street Garden Visit

Facilitators: Charles Levkoe and Airin Stephens

On the morning of Day 3, participants took cabs to the Roots to Harvest Community Garden on Lillie Street. During this workshop participants were introduced to the concept of community food systems and urban gardens. Participants learned about how food is grown in the region, the unique challenges we face in Northwestern Ontario and the importance of overcoming these challenges and growing food locally. Participants then learned about specific plants grown for food and ceremony. Finally, participants had a chance to get their hands dirty and put what they learned into practice, by doing the important job of weeding the rhubarb patches. Participants had a chance to taste the fruits (rhubarb) of their labor, though the taste was not for everyone!





C²U Expo Plenary Presentation: Dr. Eve Tuck

During this session field school participants joined other C²U participants to listen to Dr. Eve Tuck's plenary session: Sustaining Collaborative Indigenous Research. In her talk, Dr. Tuck explained the challenges faced by indigenous communities in answering the research questions that are important to them. She and her group introduced the concept of the Collaborative Indigenous Research Digital Garden, a project intended to combine participatory research and Indigenous research and to connect the fields. After the session participants reflected on the value of participatory research and enabling communities to answer the questions that are important to them.

C²U Concurrent Sessions

At this point in the field school participants attended a C²U panel session of their choice alongside other C²U attendees. Participants chose from: Session 1) *The Environment, Community, Health Observatory Network: relationships, connections and fertile tensions at the nexus of cumulative impacts and co-benefits; Place-based learning and watersheds for better integration of health, community and environment*, Session 2) *A Watershed Approach to Co-Creating Just Sustainabilities: Reflections from the Lake Superior Living Labs Network*, Session 3) *Exploring Community-Campus Models and the Role of Institutions: Bilateral transformation through community-campus engagement* Or Session 4) *"Can't Ignore Ellie": Raising the Curtain on the Lived Experience of Dementia* and *"Managing the Unknown": Exploring the Narrative of Dementia through Co-Creation*. Participants then had a chance to reflect on the presentations during their reflective practice.

Day 4

Campus Sustainable Infrastructure Tour

Facilitator: Steve Girvin

Under the guidance of Steve Girvin, students took a tour of the recently renovated CASES building on the Lakehead University Campus. The tour was used to highlight how sustainable practices are implemented

through infrastructure. Students had the chance to see and learn about state-of-the-art sustainable implementations of building practices, automated heating and lighting systems, renewable energy generation and how all of these systems work in harmony.



Climate Communication and Misinformation

Facilitator: Matthew Roy

In this workshop, participants learned about how to deal with misinformation surrounding climate change. They also learned when and how to conduct conversations with people who may be caught up in misinformation and false narratives. Participants were guided through the different types of climate deniers or skeptics they might encounter and their motivations.

Next, in a group setting participants recounted an instance where they had a disagreement with someone. They then reflected on how this made them feel, strategies they may have used to convince the person and whether they thought the person would change their mind. Next, using what they learned, participants were given examples of climate denialism or skepticism present on social media and tasked with deciding whether they would engage with, ignore, or engage with the intention of convincing others who may be reading the post, rather than the person spouting the misinformation. Lastly, participants received a real example of a comment posted by a climate skeptic or denier and had to work in groups to compose a hypothetical response to the comment.



The Solar Commons Game

Facilitator: Kathryn Milun

During this workshop, participants learned about the concept of solar commons: a model of community ownership of the common wealth which can be gathered from the sun. This model could play an important role in a just transition to a regenerative economy. After learning about the model, participants had the chance to beta test a board game designed to help explain the concepts of a solar commons and community ownership to school-aged youths. Lastly, participants had the chance to provide feedback on the experience of playing the game and provided suggestions of scenarios that they believed might make the game more applicable to a Northwestern Ontario setting.



Art and Climate Activism – All of Us

Facilitator: Betty Carpick

For Betty Carpick's experiential land-based workshop, "All of Us" with youth at the Climate Action Field School, the original idea of using an open fire to make charcoal willow sticks at the Climate Action Park site at Lakehead University was adapted due to a fire ban that was implemented at the beginning of June.

At the outset of the workshop, Betty described how art is a powerful medium of change and how fire helps speckled alder become charcoal for handmade drawing sticks. The youth learned the steps of pyrolysis, the process in which wood is turned into carbon or charcoal, while peeling and cutting alder sticks for a future burning. The preparation of the sticks was a simple way of paying forward skills and knowledge.





During the workshop, some of the provided charcoal sticks were ground to a powder and the youth added water that they had brought from natural and piped sources to make an ink. After learning some basic mark-making techniques the youth created self-portraits using the charcoal sticks as a distinctive way to look at ourselves and think about how we're made of the universe and the universe is made of us.

The climate crisis can make us feel anonymous and powerless. The youth posed for a group photograph holding their self-portraits in front of their faces as a reminder that individually and together we have the agency to be good stewards and strong ancestors.

The materiality and the processes of the workshop were a way to use land-based art to strengthen mental and emotional health during a climate crisis. Betty's teachings emphasized that it takes "All of Us" to make transformative change for the planet.



Climate Action Field School Closing: What Now? What's Next?

Facilitator: Lindsay Galway

To close the field school, participants were each given a piece of paper and asked to write down one word that described how they were feeling. Participants then crumpled up the paper and tossed it into the center, before retrieving another random paper. Participants read out the word on the paper they retrieved for the group. Finally, participants and facilitators shared some closing remarks and thanks for the week!

grateful

Alive

connected

Free

Full

Peaceful

Hope ♡

Re-invigorated!

Calm

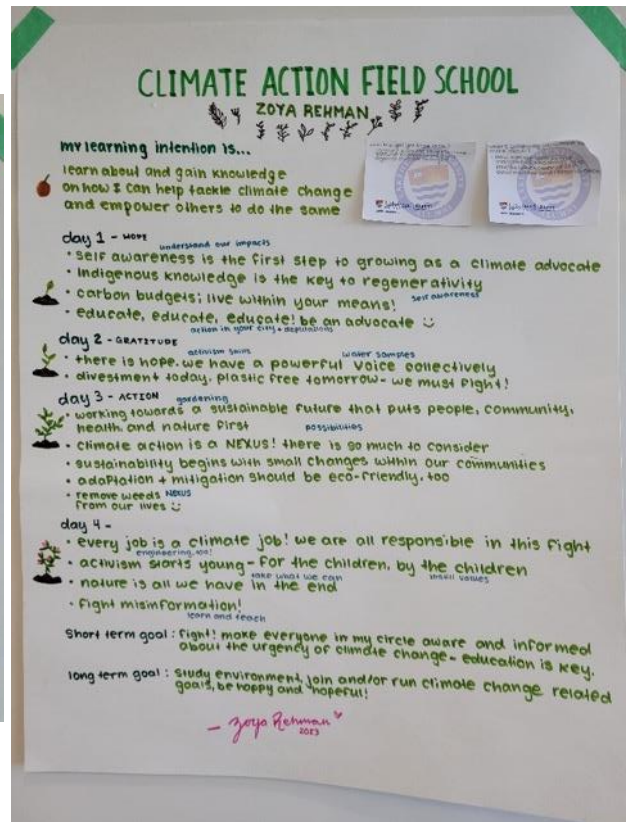
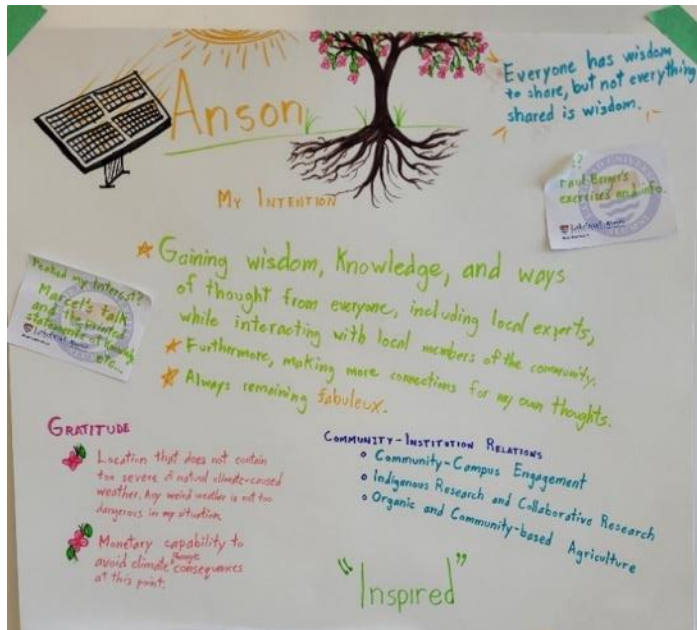
Inspired

Reflective practice and ‘homework’

Reflective practice posters

Throughout the course of the field school participants were given space and prompts to engage in reflective practice. We used learning-in-action posters to facilitate and document reflective work. In some cases, participants were prompted to think about something in particular, in other instances, participants were given free rein to reflect on workshops, learning, and ideas that emerged for them throughout the day. At the end of the 4-day field school, each participant had created a representation of their reflections and what they took away from each experience. We hope that in creating these expressions of their experiences, the participants were able to think more deeply about each experience. We also hope having these to look back on will help them to carry these lessons forward.





How To Change Everything

Participants were also given a copy of Naomi Klein's *How to Change Everything*. The book centers around the importance of the work young people do surrounding climate change and climate justice. Participants were encouraged to read the book throughout the course of the field school to supplement their learning and to further inspire them to take action. We also hoped that by gifting them each a copy to keep, they could refer back to the tools and inspiring examples in the book in future climate action they take on.



