







DRIVING CLIMATE ACTION THROUGH CLIMATE EDUCATION FOR BUILDING RESILIENCE









A Report of ClimatEd Summit, 2025

Overview

The ClimatEd Summit: Envisioning new pathways for education, was a convening focusing on bringing together educators, practitioners, communicators, and policymakers to share ideas and develop strategies for integrating climate education into the formal education system. Organized by the Climate Educators Network, the summit was held in Bangalore, India on January 30-31, 2025.

With India facing significant climate challenges, this conference was one of the first of its kind to address the urgent need for addressing the climate crisis positioning climate education as a key tool. The event saw enthusiastic participation, with 143 attendees on Day 1 and 185 on Day 2, including over 70 educators from schools and colleges, representatives from government bodies, and around 80 professionals from various organizations. This diverse gathering underscored the growing momentum for climate education across sectors.

This report encapsulates the key segments, discussions, and insights from the summit, along with a compendium of presentations contributed by organizations and institutions actively engaged in the climate education space.

Day 1

Environment Minister Mr. Easwara Khandre sent a video message for the Climate Education Summit 2025, stating,

"I congratulate the organizers for this initiative to raise climate change awareness and build resilience. I wish all participants a successful and engaging event."

Rajeev Gowda, Ex-MP and Ex-Chair of the Karnataka State Planning Commission, in his keynote address, highlighted the urgent need for climate education and its integration into policy and curriculum. He emphasised several aspects to achieve this, including:

- Interdisciplinary climate education: Climate change should be a cross-cutting theme in subjects like science, economics, and ethics to create a holistic learning experience.
- State-level action & experiential learning: Karnataka's climate action plans can serve as a model for practical, field-based education beyond the classroom.
- Green careers & future readiness: Climate education must equip students for careers in sustainability, renewable energy, and environmental policy.

"Climate change is an ideal unifying framework through which curricula across subjects can be aligned. If done right, we won't just impact our city or country, but the world itself." - said Rajeev Gowda

Mr. Gowda concluded by emphasizing the need for collaborative efforts to translate these ideas into actionable curricula and empower the next generation as climate leaders.

Inaugural Panel

This panel at the ClimatEd Summit 2025, moderated by Pallavi Phatak (Head, Climate & education, Asar social Impact Advisors), stressed the urgent need to prioritize climate education by transcending traditional teaching methods and embracing experiential learning. The panel comprised diverse perspectives, including Ms Madhavi Yadav (Assistant Mission Director, Green Tamil Nadu Mission), Brikesh Singh (Chief of Communications, Asar Social Impact Advisors), Chong Shimray (NCERT), environmental journalist Jayashree Nandi, and Matthew Pye (philosophy teacher and founder of Climate Academy). The panelists highlighted the role of storytelling and making climate change relatable to young people's daily lives.

The panelists unanimously agreed on the importance of climate education and highlighted the urgency of addressing the climate crisis through comprehensive climate literacy programs that engage students across all ages and sectors. Find below some interesting anecdotes from the panelists.

- Madhavi Yadav IFS, Additional Mission Director, Tamil Nadu Green Mission shared a striking example of how students are introduced to the interconnectedness of nature. She added that during a visit to Vedanthangal birds' sanctuary (the oldest bird sanctuary in India), they observed how bird droppings enrich water bodies, ultimately benefiting farmers by increasing soil fertility. This hands-on experience highlights the harmony between humans and nature, reinforcing the importance of climate literacy.
- Brikesh Singh, Chief of Communications, Asar Social Impact Advisors, described an impactful experiential learning
 initiative in Delhi. ASAR set up a billboard exhibition demonstrating how quickly a lung turns black due to pollution,
 clearly depicting the crisis of air pollution. Thousands of students saw firsthand the stark reality of air pollution,
 reinforcing the need for urgent climate action.
- Matthew Pye, Philosophy teacher and a founder of Climate Academy stressed the importance of students understanding 1.5 to 2-degree rise in temperature. He emphasized that schools need to move beyond recycling initiatives and address the broader systemic issue of climate change. His Climate Academy Programme focuses on empowering teenagers to understand and engage with the political, economic, and social dimensions of climate change, fostering a sense of agency and responsibility.
- Environmental Journalist Jayashree Nandi recounted a field report from Lakshadweep on coral bleaching. While
 corals disappearing in remote regions may seem distant to someone in Delhi, such stories, she added, could help
 connect global climate issues to everyday lives. She also mentioned about the consistency in reporting climate
 stories in order to position climate change as something immediate and urgent.

Showcase Presentations

The first day of the summit was designed to highlight innovative solutions and impactful stories at the intersection of climate change, education, public health, and leadership. By bringing together diverse voices—ranging from community-driven initiatives to structured educational programs—the showcase presentations aimed to demonstrate real-world applications of climate action and inspire collaborative learning.

These presentations were carefully curated to encourage cross-sectoral dialogue, showcase best practices, and provide tangible examples of how climate education can drive meaningful change. From grassroots interventions to large-scale policy advocacy, each session reflected the power of community engagement, youth leadership, and data-driven decision-making in addressing climate challenges.

For an in-depth look at these inspiring initiatives and insightful presentations, please refer to the detailed articles in the compendium section of this report.

Climate Games

Following lunch, participants were engaged in interactive climate games, where they were divided into small groups to play various climate-focused games. These immersive tools served as innovative educational methods to deepen climate literacy and foster problem-solving skills. The session showcased Metropolis, Climate Crusader, and Ready to Act, developed by ATREE, which focus on sustainable urban development, disaster preparedness, and climate solutions. Additionally, Zero Waste and Climax offered role-playing experiences that helped participants navigate real-world sustainability challenges, while Planet Saviours introduced financial decision-making tied to climate-conscious actions.

Swarathma

Swarathma, the Indian folk rock band renowned for their environmentally conscious music, took the stage on Day 1. Their performance, which featured songs centered around sustainability and environmental protection, uplifted the audience and instilled a sense of hope for climate education.





Day 2

Educators' Workshop

The workshop, "Empowering Climate Education: Integrating Best Practices and Collaborative Strategies in Schools," addressed key challenges in embedding climate education into school and college curricula. A total of 59 participants attended the workshop from schools, colleges, individual educators and organisations. The workshop highlighted innovative teaching methods, resource gaps, and the need for systemic change.

The workshop showcased successful environment/climate learning models from educational institutions like Sunnyside learning, Chennai, Inventure academy, Bangalore, Bhoomi college, and FLAME university and teachers' groups like Teachers Against Climate Crisis(TACC) and The Teachers Foundation(TTF). Sabina Fathima Sirajudeen, the founder of Sunnyside, an experiential learning school based in Chennai, took the participants through their learning program which includes children connecting with nature, learning more about climate change, solving local environmental issues, and working on projects to create local solutions. Dr. Rahul Chopra (TROP ICSU, FLAME uni) talked about how TROP ICSU is supporting teachers integrate climate education in their curriculum by conducting teachers training workshops and providing teaching resources through their website. Jaya Rakesh from Bhoomi college, Bangalore shed light on Teach For Nature fellowship through which the fellows are imparting nature education to children in various schools. Ruchi Aggarwal, representing Inventure Academy, talked about helping students become changemakers through approaches like community outreach and social impact choice projects. Maya Menon, who is the founder-director of The Teacher Foundation and Sonali Sathaye, from Teachers Against Climate Crisis (TACC) also talked about how teachers can be empowered and supported to be at the forefront of climate education.

Jayanti Ray Mukherjee, co-founder of The Climate Educators Network, talked about how Azim Premji University (APU) is spearheading the cause of environmental and climate education through their programs. The participants engaged in in-depth discussions and brainstorming to find workable solutions to some common challenges faced by educators in integrating climate education in their institutions.

Key Insights

- Empowering educators Teachers need interdisciplinary training, non-hierarchical teaching methods, and systems
 thinking skills to effectively integrate climate education. Addressing the lack of structured resources and quality
 research, particularly in the Global South, is essential
- Fostering connections Climate education must bridge scientific understanding with social justice, highlighting how environmental challenges are tied to historical inequalities. Schools should shift from theoretical knowledge to community-driven projects that encourage activism and real-world impact.
- Transforming learning spaces Schools should evolve into nature-immersive environments, integrating sustainability into campuses and curricula. Structural and programmatic changes are needed to embed regenerative practices that make climate action a lived experience for students.

Policy Narrative Workshop

The workshop on "Advocating for Climate Action through Climate Education" focused on identifying gaps in current climate education policies via group activities. A total of 124 participants attended this workshop from diverse backgrounds - educators, organisations, academicians and representatives from corporates. The workshop was designed in a way to foster peer learning and discussion.

The key take-aways from the workshop included the need for personalized and localized climate education solutions, integration of disaster management, focus on employability and green jobs, infrastructure support for teachers, and inclusive policies.

Following additional action steps emerged, particularly those related to policy advocacy and implementation:

- Policy Advocacy: Adapt climate education to different ages, regions, and cultures, integrating traditional knowledge.
 Support structured stakeholder consultations for participatory policymaking. Align state-level climate policies with NEP 2020 and global goals. Ensure teacher training includes climate literacy and integrates climate education within existing subjects.
- Implementation Strategies: Advocate funding for climate toolkits, digital resources, and teacher support. Embed disaster preparedness in curriculums with real-life simulations and case studies. Strengthen vocational training for green careers, linking climate education to job opportunities in sustainability sectors.
- Public Engagement: Ensure inclusive climate education, addressing climate justice and equity. Leverage storytelling, youth voices, and digital platforms for awareness. Engage artists, filmmakers, and influencers to enhance outreach through creative climate initiatives.
- Institutional Commitments: Establish monitoring systems to track climate education integration and learning outcomes. Foster multi-stakeholder collaboration among policymakers, educators, and NGOs. Encourage corporate partnerships for school-based climate programs and curriculum co-development.

Next Steps & Implementation Strategy

- Short-Term (0-6 Months): Launch teacher training, youth-led initiatives, and pilot localized education strategies.
- Medium-Term (6-12 Months): Engage policymakers, introduce evaluation metrics, and expand green skilling programs.
- Long-Term (1-3 Years): Institutionalize climate education in state policies, scale public-private collaborations, and monitor long-term impact.

A panel discussion, part of the policy workshop, featured experts including Dr. Chong Shimray, NCERT, Anshul Tewari Youth ki Awaaz, Dr. MK Ramesh, and Srinivas Alavilli, who discussed various aspects of climate education policy and implementation challenges.

The session, followed by the panel discussion, by Ms. Uma Mahadevan on rural local bodies and SHGs' role in environmental initiatives was enriching.

Highlights and Way Forward

The ClimatEd Summit brought together government stakeholders, NGOs, educators, academicians, and practitioners to advance climate education. By sharing success stories and best practices, participants gained fresh perspectives and actionable insights, fostering collaboration and innovative solutions.

A major highlight was the Climate Games session, showcasing the power of experiential learning. These interactive games made climate concepts more accessible and demonstrated how gamification can drive advocacy, learning, and public engagement.

The workshops held throughout the summit were another major highlight.

- Policy Dialogue Workshop A critical discussion bringing together policymakers, educators, and civil society members to assess the current policy landscape for climate education in India and identify actionable steps for improvement.
- Educators' Workshop Focused on equipping teachers with innovative, interdisciplinary approaches and systems thinking skills to integrate climate education effectively. It also addressed structural changes needed to support climate literacy.

Key Next Steps

- Formation of Region-Specific Hubs Geographically specific hubs will be established, comprising aligned organizations and institutions working within the climate sector. These hubs will serve as collectives to drive initiatives in climate education and facilitate collaborative, resource-sharing, and unified strategies for effective integration of climate education into schools and colleges.
- Exploring Strategic Partnerships Engaging with organizations like The Teacher Foundation to enhance teacher training, curriculum development, and pedagogical approaches for impactful climate education.

Compendium of articles submitted by Organizations/Institutions

Jenny PintoOorja Design
The Magical Everything

SECTION

DETAILS

Aim

This workshop, designed for students in grades 4-7, aims to enhance children's ecological literacy and provide a clear understanding of the current climate crisis. By exploring why life, as we know it, exists only on Earth and how our planet sustains it, the workshop helps children connect with the crisis personally, moving beyond abstract or distant perceptions.

Based on the book The Magical Everything by the workshop leader, the program follows the story of a young girl named Ila. Upon learning that a "magical everything" connects all life, Ila embarks on a journey through various ecosystems. Along the way, she discovers the importance of biodiversity, energy balance, and the interconnectedness of nature.

Ideal size and age group: 20 children of ages 8-14

Preparation

Craft materials:

Paper

Paper pulp

Clay

Egg shells

Mixer-grinder

Craft scissors (one pair of scissors per child)

Small packets of chips or biscuits wrapped in mlp (one per child)

Description of project / activity

This workshop engaged children in a hands-on craft activity exploring the properties of different materials. They began by examining various types of paper, including machine-made, handmade, tree pulp, natural fiber, recycled pulp, and even exotic paper made from elephant dung. This was followed by an introduction to synthetic materials like plastic, sparking a brief discussion about materials and their processing.

The craft activity itself involved grinding dry eggshells into a fine powder using a kitchen mixer. Each child then received paper pulp, eggshell powder, and terracotta clay, which they blended together by hand, adding water to create a smooth dough. After dividing the dough in half, they used one half to sculpt a figure of their choice.

Following a short break during which they received a snack in a multilayered plastic (MLP) wrapper, the children were asked to cut the empty wrapper into small pieces and attempt to knead them into the remaining half of their dough. Unsurprisingly, they were unsuccessful, as the plastic pieces wouldn't bond with the paper-clay-eggshell mixture.

This failed attempt led to a discussion about the differences between natural and synthetic materials. The workshop leader explained how natural materials like clay, eggshells, and fiber pulp, despite their varying compositions, are designed by nature to decompose and reintegrate into other natural forms, participating in the Earth's natural cycles of carbon, water, air, and other elements. This regenerative process has sustained life for billions of years. In contrast, man-made composites lack this inherent design for decomposition. The workshop concluded by connecting this difference to the linear model of production and consumption used by human civilization, explaining how it has disrupted the planet's natural cycles of matter and energy, contributing to the ecological crisis and climate change.

Assessment

No assessment except for level of engagement with the theme, the activity and enthusiasm to listen and learn.

Learning and challenges

The workshop saw a high level of engagement from the children. They grasped the scientific concepts presented and connected them to their own lives and immediate surroundings. They demonstrated a clearer understanding of the harmful effects of plastic (and other commonly used materials) on the environment and recognized the need for significant changes in human practices.

Contribution

The high engagement of the participating children suggests that this workshop effectively contributes to climate change understanding. The hands-on experience with materials and processes provided a foundation for extrapolating simple scientific principles to larger, planetary-scale problems.

Additionally, this workshop amplifies that the children are capable of understanding abstract ecological concepts and the science behind climate change, and can connect the dots if the learning experience uses familiar, everyday materials and processes. Understanding the cyclical nature of everything and the interconnectedness of all things is valuable learning that fosters critical thinking and the development of innovative solutions as they mature.

Julien Banaszuk Climate Fresk Workshop

SECTION

DETAILS

Name

Climate Fresk Workshop

Aims and objectives

Purpose of the workshop:

To accelerate the understanding of climate issues at the global level in order to help trigger the necessary changes for the preservation of life.

The collaborative Climate Fresk Workshop will teach you the fundamental science (IPCC Report) behind climate change and empower you to take Climate Actions (adaptation, mitigation, absorption and education).

Background

In order to take Climate Actions and build solutions, we first need to understand the problem (Climate Change causes and effects).

Climate Fresk is a powerful tool for providing a quality climate education. It is accessible to anyone and can be scaled quickly within an organisation or community.

Justification

Everyone contributes to climate change, at different levels, and everyone's activity contributes, directly or indirectly, to greenhouse gas emissions.

Understanding the causes and effects of climate change will help you realise that you, me, everyone needs to reduce their carbon/environmental footprint to meet the Paris Agreement target.

Description of project / activity

In just 3 hours, the collaborative Climate Fresk Workshop will teach you the fundamental science behind climate change and empower you to take action.

In order to take action and build solutions, we first need to understand the problem: Climate Fresk is a powerful tool for providing a quality climate education. It is accessible to anyone and can be scaled quickly within an organization or community

A science-based workshop: The facts in Climate Fresk are sourced from the widely-recognized scientific publications: The IPCC reports. These are the same reports that inform global political and economic decision-making at the highest level. Climate Fresk is neutral and objective and presents only established scientific facts.

An accessible and playful workshop: By activating the group's collective intelligence, Climate Fresk workshops enable participants to take ownership of the subject matter. The Climate Fresk methodology doesn't involve an expert presenting information to the group; instead, it requires all participants to take an active role in the building-up of the Fresk, becoming participative learners. As participants link the causes and effects of climate change, they are able to take a step back and understand the systemic nature of the challenges.

Empowering you to take tangible action: Through a shared understanding of the mechanisms at work, Climate Fresk enables both individuals and Organizations to have an open and positive conversation about climate solutions (mitigation, adaptation, absorption and education). Participants leave the workshop having formed a strong bond with each other, and are well equipped to implement the climate actions that they have identified.

Theory of change

Participants gather around a table in teams of 5 to 8 people. They discover the cards representing the different components of climate change and work together to connect them in order to highlight the links between cause and effect.

A facilitator (called fresker) supervises one or more teams and guides them using a collective intelligence approach. The Fresker then facilitates an exchange to debrief and explore individual and collective solutions (Climate Actions) and broaden reflection beyond climate issues.

Learnings and challenges

As of now, Climate Fresk have trained more than 2 million people worldwide. We are deploying the workshop in 150+ countries and we have a network of 75000+ facilitators worldwide. The workshop is used by small and large organizations (private limited, startup, international organisation, municipalities, governments) as well as schools/colleges and universities.

Contribution

Climate Fresk Workshop is a climate education workshop.

The first phase of the workshop, Understanding, is using 42 (adult) or 20 (junior) cards and all these cards have been inspired by the IPCC report (AR6).

During this phase, the participants will link Climate Change causes and effects. Once all the cards are connected, you will discover the big picture of Climate Change.

Vijay SehrawatYouth for Climate India

SECTION

DETAILS

Name

Climate Justice Library

Aims and objectives

The Climate Justice Library aims to provide accessible and inclusive climate-related literature and resources to young people and civil society, enabling them to understand the impacts of climate change, explore intersectional themes, and contribute to informed action. It seeks to bridge the gap between academia and civil society by fostering collaboration, offering a diverse range of materials in various languages, and addressing issues like climate anxiety. The library also serves as a community hub for learning, dialogue, and co-creation, facilitating youth-led initiatives and collaborations on climate justice.

Background

The Climate Justice Library was initiated in response to the limited access to climate-related literature. Young people face significant challenges in accessing credible, region-specific resources on climate change, its impacts, and solutions. Additionally, there was a need for physical spaces where youth could engage in climate education, discussions, and co-learning. The library emerged as a solution to these gaps, offering a resource hub that not only provides literature but also fosters community-driven climate initiatives.

Justification

The urgency of addressing climate change is amplified by the growing anxiety and confusion among youth regarding its far-reaching impacts. Climate change affects multiple aspects of life, including health, livelihoods, and ecosystems, yet access to comprehensive, accessible knowledge remains limited. This lack of education exacerbates climate anxiety, particularly among young people, preventing them from taking proactive steps. By providing free access to literature and a supportive community space, the Climate Justice Library directly contributes to informed decision-making, building resilience, and mobilizing collective action toward a sustainable, equitable future.

Description of project / activity

Launched on 15th March 2022, the Climate Justice Library in New Delhi is a youth-led initiative focused on providing accessible climate-related literature to young people and civil society. Its mission is to bridge the gap in climate education, addressing challenges such as limited access to literature, language barriers, and the disconnect between academia and civil society. Over the past two years, the library has grown to house over 2,500 books, publications, and research papers from esteemed institutions such as the Centre for Policy Research, Centre for Science and Environment, and Greenpeace India.

The library serves as a unique resource hub where young people can access rare materials that are otherwise hard to find, particularly on intersectional themes like gender, health, and indigenous knowledge. Beyond literature, the library hosts interactive events, panel discussions, and workshops on pressing climate issues, providing a platform for youth to engage directly with experts, researchers, and NGOs. These events have sparked valuable collaborations and partnerships, strengthening the ecosystem for climate action and research. As a physical space, the library also acts as a co-learning hub, where young people can meet, discuss, and share ideas. It provides a venue for curated sessions, group activities, and field visits that foster a sense of community and collective learning. This space aims to alleviate climate anxiety by offering young people to have the opportunity to connect with like-minded individuals, build skills, and gain the confidence to lead in the climate movement. To ensure the library is accessible to a wide range of users, we have made a conscious effort to curate content in multiple languages, with a particular focus on Hindi. We are also exploring other modes of accessibility, including documentaries, games, and interactive materials to cater to diverse learning styles. Despite challenges such as limited space and resources, the library has made significant strides in supporting youth engagement in climate justice and advocacy.

Theory of change

The Climate Justice Library's theory of change is grounded in the belief that providing accessible, intersectional climate education will empower young people to become active, informed advocates for climate justice. Our actions focus on three main areas: accessibility of resources, community engagement, and partnerships with academia and civil society. By offering a wide range of literature, materials, and events, we aim to bridge the knowledge gap and build youth capacity in understanding and addressing climate issues.

Our theory is built on the premise that when youth have access to reliable, inclusive climate education and engage with experts and peers, they will be better equipped to take action, both individually and collectively. This knowledge-sharing model creates a ripple effect, leading to more informed advocacy, policy change, and community-driven solutions. Furthermore, by addressing climate anxiety and fostering supportive spaces, the library aims to inspire hope and collective action rather than feelings of helplessness. We believe that by facilitating collaboration across sectors (academic, civil society, youth), the library will contribute to a more integrated and inclusive climate movement. Through continuous learning and reflection, we seek to evolve and expand the library's impact in supporting climate education and justice.

Learnings and challenges

Over the past two years, the Climate Justice Library has learned valuable lessons and faced several challenges that have shaped its growth.

ACHIEVEMENTS

Access to Unique Resources: The library has provided over 1,200 individuals with access to rare and intersectional climate literature. This has helped young people and researchers explore climate change from diverse perspectives.

Partnerships and Collaboration: Successful collaborations with research organizations like CEEW, Heinrich Böll Stiftung, and Greenpeace India have strengthened the library's content and facilitated knowledge sharing.

Youth Engagement: Events such as discussions on coal mining, heat waves, and climate anxiety have attracted a wide range of youth participants, showcasing the library's role as a hub for climate discourse.

CHALLENGES

Limited Resources: The absence of a full-time librarian and youth engagement coordinator has hindered the library's ability to fully engage with institutions and expand its outreach.

Space Constraints: Operating in a shared space has limited the library's ability to host large events and accommodate a growing number of visitors. Scheduling conflicts with partner organizations have also reduced the frequency of events.

Access Barriers: Despite efforts to make the library accessible, there are still issues with language, timing, and digital access. A significant portion of our materials are in English, and many Hindi-speaking visitors have expressed difficulty finding relevant content. Additionally, the library's opening hours are restrictive for working individuals.

Sustainability of Funding: While the library has received book donations and financial support, the challenge of securing sustained funding for long-term operations and expansion remains a key concern.

LEARNINGS

Diverse Learning Needs: We've learned the importance of catering to diverse learning preferences, such as incorporating multimedia and interactive materials alongside books.

Expanding Digital Accessibility: Developing an online catalog and enhancing digital engagement will be crucial in increasing access to resources for a wider audience.

Community-driven Approach: The success of the library has highlighted the importance of community involvement in shaping its direction and ensuring its relevance.

Contribution

The Climate Justice Library is contributing significantly to the field of climate education by addressing the critical gaps in access to climate literature and resources, particularly for young people in India. Its unique focus on intersectionality, accessibility, and community engagement has set it apart as a transformative space for youth empowerment and climate advocacy. The library has successfully bridged the gap between academia and civil society, fostering partnerships with key organizations and researchers to ensure the availability of diverse, high-quality resources. By hosting events and facilitating dialogue between youth, experts, and researchers, the library is helping to create an informed, motivated, and connected community of young climate advocates.

In addition, the library's emphasis on combating climate anxiety through education and community support is an innovative approach to addressing the emotional challenges young people face in the climate crisis. By providing a safe and supportive space for learning and action, the library encourages young people to transform their anxiety into meaningful advocacy.

Through its work, the library is creating a model for inclusive, youth-led climate education, which can be replicated and expanded across other regions, thereby contributing to a more informed, engaged, and resilient generation of climate leaders.

Shannon B Olsson The Echo Network

SECTION

DETAILS

Name

I am One Health: a citizen science initiative

Aims and objectives

The I Am One Health initiative, developed by the echo network in collaboration with the Bengaluru Science and Technology Cluster (BeST), empowered communities to actively participate in dengue prevention efforts. The project aimed to raise awareness about dengue prevention, train students in One Health concepts and research, and engage residents in co-creating data-driven solutions. The primary objective was to leverage the power of local residents in a city-wide citizen science initiative that provided direct information on hyperlocal environmental conditions for a future surveillance dashboard. At the same time, it mobilized a citywide effort to mitigate water stagnation and contamination issues.

Background

2024 witnessed an alarming rise in dengue cases worldwide, and experts point to human impacts on our environment as major factors increasing disease risk. Standing water in waste piles, broken pipes, construction sites, and even garden pots can serve as breeding grounds for mosquitoes who can transmit dengue. Citizen scientists are ideally placed to participate in real-time, hyperlocal data and information gathering for better city planning and decision-making for public health. By addressing this issue through community involvement, this initiative seeks to empower the public and spread awareness of these issues for more resilient and healthier cities.

Justification

Residents must be empowered to actively participate in observation, data collection, and decision-making to help prevent and monitor disease risks. Further, student ambassadors can be trained to inform neighbors and peers about One Health and the role of environmental and animal health in human health outcomes. To address these goals, we need to establish accessible curricula and easy-to-use digital tools that allow students and residents to easily educate themselves and others and participate in the research process.

Description of project / activity

Focusing on high school students and residents across Bengaluru, India, the initiative equipped participants with the necessary training and tools to collect hyperlocal environmental data critical to understanding the spread of dengue. To do this, we created a dedicated website, www.iamone.health, featuring relevant explanatory content and videos in English and Kannada on dengue, One Health, and citizen science. In addition, a training module was created for masters-level student trainers and local teachers to engage students in the citizen science initiative. Emphasizing the "train the trainers" model, both trainer categories participated in workshops to assess the curriculum and discuss how to train students and residents the city. The module can he accessed www.iamone.health/citizen-science/learning-mo dule-en-only.

To address the need for accessible, efficient, and accurate data collection and storage, we tested two platforms: Epicollect5 and a customized WhatsApp chatbot. Epicollect5 is a commonly used citizen science tool designed to gather detailed data. In contrast, the WhatsApp chatbot is an accessible and multilingual tool for reporting simple information via a mobile phone app widely used in India. In assessing both platforms, we asked users several questions regarding data input, including sharing the GPS location and pictures of standing water, identifying the type of infrastructure where the water was found, and providing a basic description of the standing water. We also enquired about the water's duration to ascertain if it could serve as a breeding site for mosquitoes (approximately 8-10 days from egg to adult). Through constant participant feedback, we streamlined our approach by consolidating and modifying the data collection process. The WhatsApp chatbot was found to be more accessible for participants and was ultimately selected and refined for further use. Both platforms can be accessed through the following links:

Epicollect5:

five.epicollect.net/project/i-am-oneheal

WhatsApp chatbot:

wa.me/918496937347?text=Hi

To spread awareness of the initiative across the city, we also held a one-day festival with several local one health-related organizations at the Visvesvaraya Industrial and Technological Museum in Bengaluru, attended by over 600 local residents. We also participated in exposure workshops for various schools across the city and presented a talk at the Ramaiah University of Applied Sciences. During these events, we explained the role of citizen science, demonstrated our website, learning module, and tools, and guided attendees in using the tools with their mobile phones.

Theory of change

The I Am One Health initiative raised awareness and empowered communities in Bengaluru through extensive outreach, training, and citizen engagement. Over 90 high school students were trained across six schools, supported by teachers and volunteers from organizations like Parikrma Humanity Foundation and CII Young Indians. Using the Epicollect platform and, ultimately, the WhatsApp chatbot, the program collected roughly 400 data points on standing water citywide, contributing to a planned vulnerability index and a future dashboard for dengue prevention. After data cleaning and collation, the data was shared with scientists collaborating on the broader project and was integrated with Google Maps to visually represent the collaborative efforts. The location and details of the sites for all data points are presented via the link: www.iamone.health/map

The initiative featured an educational series, a chatbot, a festival, workshops, conference talks, learning modules and bilingual information, and a dedicated website, ensuring broad accessibility. This process was documented in a video at www.youtube.com/watch?v=GcMDAbbz2_o

Learnings and challenges

This pilot study provided hyperlocalized information, highlighted as a critical gap by several health experts. Using citizen science approaches and digital tools, participants documented factors such as water stagnation, which can serve as potential mosquito breeding grounds. As dengue and other zoonotic diseases are global problems, this effort has the potential to scale beyond one city. Collaborative efforts with government bodies can help scale the efforts beyond conventional boundaries.

In the future, we intend to operationalize the chatbot and enhance its functionality by integrating additional climatic factors such as temperature, humidity, rainfall, and current wind speed during observation. We can also integrate geographical and environmental indicators like altitude, green cover (e.g., NDVI), and blue cover (e.g., NDWI), as well as population density, current air pollution levels, and mobility information. Together, these enhancements can provide a comprehensive, data-driven approach for improved environmental monitoring and disease prevention. With these additions, we anticipate that this tool can be used widely by several municipalities.

We also found that sustained and clear media outreach is necessary to encourage participation and action. While students engaged in sustained participation through guidance from teachers and peer mentors, residents sporadically contributed when targeted through mass and social media channels. Further, residents were hesitant to take action to remove the standing water, suggesting a specific need for awareness of the safe and health issues of individual action. To encourage resident action, such additions can be incorporated into the curriculum.

This effort increased capacities, raised awareness of the impacts of climate and environment on health, and provided increased community partnership between government and citizens. By integrating hyperlocal data with broader datasets - including disease prevalence, mosquito abundance, and community awareness - gathered through collaborative partnerships, the program aims to develop a comprehensive vulnerability index for the city. This index will help identify high-risk areas, enabling targeted interventions. At the same time, the initiative fosters awareness of water stagnation and contamination, encouraging proactive efforts to mitigate these issues. Through students' active participation as ambassadors and local trainers' guidance, the program inspired collective action and raised awareness to combat the spread of dengue in Bengaluru.

Soumi Duttagupta

Founder Regensys

SECTION

DETAILS

Aims and objectives

The aim of this initiative is to integrate eco pedagogy into educational practices to build place-based learning, community consciousness and environmental stewardship with tools like systems thinking (framework for solving complex problems) and design thinking (creative problem-solving tool).

OBJECTIVES

- Building a self-community-environmental awareness among the future generation and fostering a sense of ecological and societal well-being.
- Empowering the students to go beyond the silos of subject barriers and learn to imbibe interdisciplinary thinking and learning.
- Empower educators to implement eco pedagogy effectively in their regular classrooms.

Background

The pressing ecological crises tell us as the world is changing, so must we change the way we teach, learn and think, which underscores the need for transformative education. Current pedagogical models often fail to engage learners in systemic thinking about environmental issues. Inspired by the principles of sustainability and our traditional Indian way of learning through nature, this initiative emerged to bridge this gap by reimagining education as a tool for ecological resilience and social justice.

Description of project / activity

BACKGROUND

The more we delve deeper into the present-day challenges and crises, we understand that none of the crises we are facing today are isolated; they are deeply interconnected; the biodiversity loss, climate change, societal inequities and geopolitics. Addressing these problems requires a generation equipped with the knowledge and empathy to act responsibly.

JUSTIFICATION

Eco pedagogy provides a holistic framework to inspire learners to envision sustainable futures and take meaningful action.

DESCRIPTION OF PROJECT/ACTIVITY

The Eco Pedagogy initiative revolves around integrating environmental themes into diverse curricula. Key activities include:

Workshops for Educators: Training sessions to familiarize teachers with eco pedagogy principles, enabling them to weave environmental consciousness into various subjects, breaking the barriers of disciplines as they address an educational context and train them on nature -based learning.

Interdisciplinary Curriculum Development: Designing learning modules that blend ecology with language, arts, mathematics, history, and science. For example, exploring the mathematics of waste audits or storytelling inspired by tribal ecological wisdom.

Student Engagement Programs: Organizing nature-writing workshops with schools, SDG based social and climate action projects for middle school and high school students, and interactive sessions that emphasize systems thinking.

Community Collaboration: Partnering with local communities to include indigenous knowledge and sustainable practices in learning materials.

Theory of change

The Eco Pedagogy initiative operates on the belief that education is a powerful catalyst for change. By embedding sustainability into learning processes, the initiative fosters systemic awareness among students. The ToC posits that interdisciplinary approaches and active engagement will lead to a shift in students' mindsets, cultivating environmentally responsible behaviours and innovative problem-solving. These shifts, in turn, will contribute to broader societal and ecological transformations.

Learnings and challenges

Key learnings include the effectiveness of interdisciplinary approaches in engaging students and the value of incorporating indigenous perspectives. Success has been observed in student-led projects that address real-world ecological problems and understanding the importance of addressing a problem through systems lens.

Challenges include resistance to change within traditional education systems and the need for sustained teacher training. Limited resources for scaling up initiatives and varying levels of environmental awareness among stakeholders also pose hurdles.

Contribution

This initiative contributes to climate education by embedding ecological literacy into the fabric of teaching and learning. It offers scalable models for integrating sustainability into curricula, preparing a generation of learners who can address climate challenges with creativity, empathy, and action-oriented mindsets

Envisioning New Pathways for Education: This project reflects the transformative potential of eco pedagogy in reimagining education as a tool for addressing global ecological challenges. By cultivating a new generation of environmentally conscious learners, it paves the way for sustainable futures.

Shruti JhaNature Journaling Green Panther

SECTION

DETAILS

Name

Nature Journaling - Nature journaling is a way to focus on your ideas, observations, and experiences of nature. You don't have to be an artist or a writer to start. These skills can be learnt by anyone, and you can develop them with deliberate practice.

Aims and objective

Explore the Outdoors: Nature journaling encourages kids to spend more time outside, exploring and observing their surroundings.

Cultivate Observation Skills: Nature journaling helps children develop their ability to pay attention to details and make careful observations.

Enhance Artistic and Scientific Skills: By drawing, writing, and recording their observations, children engage both their artistic and scientific minds.

Level

KIDS CAN NATURE JOURNAL AT ALL GRADE LEVELS...

According to Bethan (Founder of International Nature Journaling week), children can write a nature journal as soon as they are old enough to hold a paintbrush.

Preparation

Children utilize their senses as a primary cognitive tool, cultivating a process-oriented approach through playful exploration of their surroundings. They embody a discovery mode, characterized by openness, creativity, and fearlessness.

Size

Ideal for 15-20 children, allowing for personalized guidance and peer interaction

Assessment

Nature journaling activities are assessed using a combination of...... NOTHING!

These journals are a REMINDER that nature journaling is about personal expression, not perfection!

Contribution

Nature journaling contributes to climate education by fostering awareness, empathy, and stewardship. By documenting local flora, fauna, and seasonal changes, children develop a personal connection with nature. Kids learn to observe patterns and ask critical questions, aligning with climate literacy principles.

This experiential approach bridges the gap between theory and practice. By cultivating a generation of keen observers and storytellers, nature journaling instills a sense of responsibility and hope, essential for addressing climate challenges.

Iraa Swasti Independent

SECTION

DETAILS

Name

Climax, The Board Game

Aims and objectives

Climax is a board game to help people understand the relationship between their actions in the present and their consequences on the future. The game aims to simplify the complex subject of climate change.

Level

Suitable for 14+

Preparation

None

Size

4-6 players currently. Might be able to expand to larger teams as one role can be assumed by multiple players.

Description of project / activity

Game Setup

- Place the game board in the center and have players sit around it
- Place the crises cards on the crises cards placeholder space on the board
- Place the mitigation cards on the mitigation cards placeholder space on the board
- Place the round cards on the round card placeholder space on the board
- Place the group token at the bottom of the thermometer marked 'Start here'
- Place the GDP token at the '0' mark on the GDP path
- Put all the emission cubes i.e. the carbon budget available to the group next to the board.

Setup for players

- 4-6 players can play this game.
- Each player randomly picks one role card (farmer, CEO, builder and consumer) and takes a human token to depict that role.
- Each player also picks the 5 decision cards associated with that role and keeps them.
- Each player picks the secret mission card for their role and keeps with them. This card is optional to use as it adds complexity.

How to win the game?

There are 2 conditions you need to meet to win the game -

- In the final round i.e. round 4, the total cumulative emissions of the group should not exceed the threshold defined on the round 4 card
- The team also needs to meet the GDP target in round 4.

When is the game over?

- The team completes round 4 or
- The team reaches 3 degrees increase in temperature before round 4 or
- The team is out of emission cubes or their carbon budget at any point in the game

How to play

There are 5 rounds in this game i.e. round 0 through 4. Round 0 is a dummy round to understand the gameplay. This is a cooperative game where all players play against the board and not against each other.

Start of the round

- At the start of each round, one player chooses to play first and picks the first player marker. The game continues clockwise from there for that round.
- Players keep the round 0 card face up on the board to see the conditions applicable in that round.
- There are 2 conditions on all round cards except the round 0 card.
- an emissions threshold for the group
- a GDP target for the group.
- Once the round is complete, pick the round 1 card and do the same as above.

Actions on your turn

- The first player picks one decision card from their set, reads out loud the question and the two options available to choose from in front of the group.
- The player has to choose one option of the two and place his/her human token on that choice for others to know.
- Take the number of emission cubes associated with your choice and place on the emission spaces on the map of India on the game board. Place the cubes near to your hometown on the map.
- Move the marker on the GDP path on the game board as per the amount of GDP increase associated with the option you chose on the decision card. This will help you keep track of the GDP.
- The player on the left of the first player takes the next turn. Each player gets their turn and takes the actions above.
- The group is encouraged to collaborate and discuss their options and then make a decision.

End of each round (Round 0 through 3)

Emissions

- Calculate the total emissions of the team and compare with the round threshold mentioned on the respective round card facing up on the game board. Round 0 has no thresholds.
- If the total emissions are within the threshold, proceed to the next round.
- If the total emissions exceed the threshold, increase the temperature of the earth by 1 level.
- Move the group marker one level up on the thermometer on the game board and pick the number of crisis cards mentioned next to that temperature increase.
- Conditions on the picked crisis cards apply on the next round.
 GDP
- Calculate the total GDP of the team at the end of the round and compare with the target GDP of that round mentioned on the respective round card.
- If the GDP target for the round is met, pick 1 mitigation card from the game board and keep with the group. You can use this card anytime in the upcoming rounds to either reduce your emissions or increase your GDP.
- If the GDP target for the round is not met, the group must select 1-2 low-cost choices on their decision cards in the next round.
- The rupee symbol indicates the cost of the choice. A single rupee symbol means relatively lower cost while a two-rupee symbol indicates a relatively costlier choice.

End of last round

Fmissions

- The last round is special as in this round, the total cumulative emissions across rounds 1 through 3 are considered against the threshold set on the Round 4 card. This is to show the significance of historical emissions, the gases that have already been emitted in the air If the total emissions are within the threshold, the team wins.
- If the total emissions exceed the threshold, the team loses.
- To keep things interesting, this round also has a GDP target specific to that round that needs to be met.

Assessment method

After playing the game, there is a debrief session where the moderator will ask questions on the following themes -

- 1. The players' experience of the game in terms of the feelings it generated while making choices, collaborating, not meeting or meeting thresholds, using mitigation cards.
- 2. The players' personal experiences of climate change.
- 3. Do they see any relation with the real world around us?
- 4. A discussion on a country's GDP vs emissions. Can they move together at the same pace?
- 5. Were the players able to understand the key players in the system who have the power to change the status quo by making different choices?
- 6. Were the players able to see the multiple crises unfolding and not just the carbon emissions?
- 7. Were the players able to see the climate justice angle that some players have disproportionate power, may have contributed less to the problem and are yet impacted relatively less than others?

Learnings and challenges

- 1. How to simplify the concept of climate change without dumbing it down too much that the nuances are lost
- 2. The players spend more time on the math of calculating the emissions and GDP every round and relatively less time on the text of the two choices available in the latter rounds because they are keen to win.

Contribution

The game can help initiate discussions in a classroom or outside the classroom on why climate change is happening and what actions can people take to mitigate or adapt to the changes we are experiencing.

Aditi Pathak

Role of Emotions in Climate Change Education Independent Consultant

SECTION

DETAILS

Name

Fostering Emotional Resilience in Climate Education

An experiential session designed to empower teachers with strategies to address students' emotional responses to climate change and inspire constructive engagement.

Aims and objective

To equip teachers with emotional regulation techniques for climate education, enabling them to create a safe space for dialogue, foster empathy and hope, and motivate students to adopt positive environmental behaviors through practical and collaborative strategies.

Leve

Ideal for middle and high school educators or Climate Change Education (CCE) practitioners working with students aged 11–18.

Preparation

Materials: Sticky notes, markers, a world map or whiteboard, and printed handouts of curated youth-led climate action stories.

Technology: Arrange a projector and laptop for displaying images or short videos related to climate change impacts and success stories.

Setup: Organize the room to allow group work, ensuring each group has a dedicated workspace.

Size

The ideal group size is 15–25 participants to ensure active engagement and effective group discussions.

Description of project / activity

Session Flow

1. Welcome and Context Setting (10 minutes)

Introduce the session's purpose: addressing emotional resilience in climate education. **Prompt:** "Think of one emotion you associate with climate change. Share it with the group." **Objective:** Highlight the importance of emotional awareness in climate learning.

2. Activity 1: Climate Emotion Map (20 minutes)

Step 1: Provide sticky notes and ask participants to write one emotion they feel about climate change, linking it to a place they care about.

Step 2: Participants place their notes on a world map or whiteboard.

Discussion Prompt: "What patterns do you notice in the emotions shared? How might students feel similarly or differently?"

Outcome: Awareness of the diverse emotional landscape tied to climate issues.

3. Activity 2: Emotional Regulation Techniques (30 minutes)

Step 1: Lead a mindfulness exercise, such as guided deep breathing or a short visualization connecting participants to nature.

Step 2: Role-play activity: Participants practice responding to a student expressing climate anxiety, focusing on empathetic listening and fostering hope.

Prompts: "What strategies helped validate the student's feelings? How can you shift the conversation toward action and hope?"

Outcome: Teachers learn practical techniques to manage emotions in the classroom.

4. Activity 3: Storytelling for Hope (40 minutes)

Step 1: Share 3–5 curated stories of successful youth-led climate actions. Include visuals or videos for engagement.

Step 2: Divide participants into groups to discuss:

"Which story inspired you the most, and why?"

"How can similar examples be incorporated into your teaching?"

Step 3: Groups draft outlines for a positive story they can share with students.

Outcome: Teachers understand the power of storytelling in shifting focus from despair to hope.

5. Reflection and Takeaways (20 minutes)

Activity: Reflective Journaling – Ask participants to write one emotional regulation strategy they plan to use and one action step for empowering their students.

Closing Prompt: "Share one word to describe how you feel after this session."

Outcome: Participants leave equipped with actionable strategies and a sense of empowerment.

Key Prompts Throughout the Session

"How does acknowledging emotions help in climate education?"

"What strategies can help turn climate anxiety into constructive action?"

"How can stories of hope inspire positive environmental behaviors in students?"

Contribution

This experiential session ensures a balance between cognitive and emotional approaches, helping teachers foster resilience and hope in their students.

Muhammed Jaseel C.K. Tata Institute of

Social Sciences

Naji Mahfood The Ignite Foundation

Ijas HakkimThe Ignite Foundation

SECTION

DETAILS

Name

Winter School on Environment and Climate Change

Aims and objective

The Winter School on Environment and Climate Change aims to equip youth and young adults with the knowledge, skills, and motivation to address climate challenges and promote sustainability. Its objectives are:

- **1. Environment and Climate Education:** Raise awareness about climate change, its impacts, and the importance of mitigation and adaptation strategies.
- **2. Climate Leadership and Social Entrepreneurship:** Cultivate leadership skills and introduce social entrepreneurship as a means to develop innovative and sustainable solutions aligned with the Sustainable Development Goals (SDGs).
- **3. Community Engagement:** Encourage active participation in local and tribal communities in Kerala through volunteer initiatives and hands-on projects, fostering collaboration and mutual learning.
- **4. Individual Transformation:** Inspire participants to become informed, responsible citizens with fresh perspectives and a commitment to social and environmental change.
- **5. Home Community Impact:** Enable participants to implement climate action projects in their communities, driving localized efforts for sustainability and transformation.

Background

India's demographic advantage presents a unique opportunity to shape the future. However, India faces a leadership gap in addressing complex societal challenges. Team Ignite India recognizes the need to nurture changemakers and social entrepreneurs, especially from marginalized communities. Formal education often overlooks leadership development for social change. The School for Social Transformation addresses this gap by fostering youth leadership, particularly in climate action, to build a more inclusive and sustainable future for India.

Description of project / activity

The **School for Social Transformation** is an experiential leadership development program designed for aspiring changemakers aged 18-35, with the goal of inspiring and empowering them to become effective leaders in their communities.

The program comprises a comprehensive learning journey that nurtures personal growth, leadership abilities, and a deep understanding of community challenges.

1) Online Preparatory Period (Online)

The program begins with a 4-8 week online preparatory phase, where participants engage in workshops, reflective exercises, and foundational training. This period focuses on areas such as social change, active citizenship, personal development, and the impact individuals can have on their communities.

2) Winter School (Offline)

The second phase is a 9-day immersive learning experience in Kerala. During this time, participants deepen their self-awareness and leadership skills while gaining a comprehensive understanding of local community challenges. This phase includes collaborative activities, cultural exchanges, and discussions that foster the spirit of changemaking and social entrepreneurship. It is designed to inspire participants and equip them with the tools to take meaningful action for transformative change.

3) Community Action Project (At Home Community)

The program culminates in a 6-month mentorship and community engagement phase, during which participants receive one-on-one guidance, peer feedback, and resources to help them design and implement a meaningful action project in their respective communities. This phase ensures that participants can apply what they have learned and create tangible, sustainable impact in their local contexts.

Activity in Focus: Winter School- Experiential learning hosted at a community organization 9-Day Schedule for School for Social Transformation

Day 1: ...and they come together to create a better world

On Day 1, participants come together after an online engagement and selection process. The objective is to build trust and foster personal connections among the group. The activities include a welcome session titled "Welcome to the Tribe", the River of Life exercise to reflect on life milestones, and Theatre of the Oppressed to break barriers. The methodology involves experiential learning through group activities and reflective exercises to encourage self-awareness and connection.

Day 2: A Journey to SELF

On Day 2, the focus shifts to exploring personal values and leadership traits. The objective is to help participants identify their core values and envision their leadership potential. Activities include a workshop on Values and Leadership, a reflection exercise called Personal Vision Mapping, and an Evening Circle for sharing stories of impact. The methodology combines facilitated workshops, guided reflections, and peer-to-peer storytelling to deepen self-awareness.

Day 3: From SELF to Society

Day 3 emphasizes the transition from personal growth to understanding societal connections. The objective is to enhance mindfulness, empathy, and emotional resilience. Activities include a session on Mindfulness and Resilience, a workshop on Empathy in Action, and an exercise called Future Self Visualization. The methodology incorporates mindfulness techniques, empathy exercises, and visualization practices to develop emotional resilience and social connection.

Day 4: Social Change and Active Citizenship

On Day 4, participants explore local development challenges and envision impactful solutions. The objective is to understand development issues and the role of active citizenship. Activities include a field visit to local climate action initiatives, participation in the community projects and initiatives and a discussion on Decoding Development. The methodology involves on-ground learning, interactive discussions, and creative vision presentations.

Day 5: Sustainability, Sustainable Development, and Global Citizenship

Day 5 focuses on sustainability and active citizenship in the context of global development. The objective is to strengthen understanding of rights, responsibilities, and sustainable development practices. Activities include sessions on Active Citizenship and Perspectives of Development, a workshop on Rights, Duties, and Responsibilities, and a Problem Tree Analysis. The methodology features participatory workshops and collaborative problem analysis techniques.

Day 6: The World We Want to See - Dreamers Festival

Day 6 inspires participants to envision a sustainable and equitable future. The objective is to explore advocacy and mobilization for societal change. Activities include an exercise on Exploring Power Structures and Advocacy, analysis of successful grassroots movements, and a reflection session titled My Role in Society. The methodology leverages case study analysis, group discussions, and personal reflections to foster visionary thinking. A festival of Dreams, Dreamers Festival is the highlight of the day.

Day 7: Designing Social Change - Action at Home

On Day 7, participants focus on identifying community challenges and prototyping solutions. The objective is to employ design thinking to drive social impact. Activities include a session on Design Thinking for Social Impact, a group activity for problem identification and stakeholder analysis, and a workshop on Ideating Solutions. The methodology integrates design thinking practices and stakeholder mapping exercises to create actionable solutions.

Day 8: Leading Social Change - We're Disrupters, Leaders, and Social Entrepreneurs

Day 8 is dedicated to prototyping and refining solutions for community impact. The objective is to develop and iterate action plans with mentorship support. Activities include Prototyping Action Plans and Solutions, mentorship-driven feedback sessions, and preparation for solution presentations. The methodology emphasizes iterative prototyping, mentor-led guidance, and collaborative refinement.

Day 9: Let's Change the World - Solutions Festival

The final day celebrates the journey of participants as changemakers. The objective is to present solutions and commit to future action. Activities include the Solutions Festival, a reflection session on Commitment to Action, and a closing ceremony titled Celebrating the Journey. The methodology involves public presentations, reflective exercises, and celebratory activities to mark the completion of the program.

Theory of Change

The Winter School on Climate Action provides young people with climate and environmental education, equipping them with the knowledge and skills to identify pressing climate concerns. Through workshops, hands-on projects, and mentorship, participants develop engagement plans and implement short-term initiatives addressing local environmental challenges. With a supportive ecosystem, including experts, policymakers, and social entrepreneurs, these projects can evolve into long-term climate-focused projects, Organizations or social enterprises. This process fosters a culture of innovation and sustainability, enabling young leaders to scale their impact. In the long run, the program strengthens leadership and cultivates changemakers who drive systemic solutions in climate action, mitigation, and adaptation.

Learnings and Challenges

KEY FINDINGS

Micro-Level Impact: Local-level community actions by participants have shown significant potential in giving awareness on climate challenges.

Engagement: Hands-on activities like beach cleanups, bird watching, biodiversity campaigns and awareness campaigns effectively inspire participants and communities alike.

LEARNINGS

Leadership Development: Experiential learning fosters leadership skills and encourages participants to take ownership of climate action.

Collaboration: Community-driven approaches amplify the impact of individual efforts.

CHALLENGES

- **1. Ecosystem Constraints:** Building social enterprises around climate solutions requires additional ecosystem support.
- **2. Sustained Engagement:** Keeping participants motivated during the extended community action phase needs continuous mentoring and resources.

Contribution

The Winter School contributes to climate education by:

The outcome of the Winter School can be assessed at multiple levels: host community, home community, and participant level. During the latest edition held in Varkala in the Thiruvananthapuram district of Kerala, the host community changes included a Responsible Tourism campaign in Varkala Cliff Beach, community space rejuvenation, beach cleanup campaign, climate education programs in NSS camps in nearby schools, and the BottlesUp campaign, where plastic bottles of students were replaced by steel bottles.

The home community refers to where the participants come from. For this edition of the Winter School, participants came from different parts of Kerala, and community engagement was mandatory to be invited to the program. The engagement activities included biodiversity awareness programs, nature walks for youth, birdwatching for students of Kerala University, and climate anxiety listening spaces, to name a few.

At the participant level, the program provided an opportunity to learn more about self and society, reflect on life so far, and plan for the future. This was based on the belief that social transformation is an extension of building leadership and fostering social change. The participants' learning was supported by an LMS designed specifically for this purpose, where a four-module course was offered on development, sustainability, and climate action. Post Winter School, 15 climate-related projects are in the process of being implemented across Kerala.

Vaishali Sharma

Program Manager

Centre for Excellence - Sustainability Piramal Foundation

SECTION

DETAILS

Name

Carbon Neutral School Initiative: Pathways to Climate Resilience for NextGen Green Leaders

Aims and objective

The Carbon Neutral School Initiative led by local governance aims to transform schools into eco-friendly hubs that lead community-wide climate resilience.

By integrating sustainability principles into education, the initiative fosters eco-conscious behaviours, reduces carbon footprints, and inspires collective action. Objectives include:

Embedding climate education into school curricula.

Promoting sustainable practices such as waste segregation, renewable energy use, and tree planting.

Building capacity among teachers and students to implement eco-friendly projects.

Strengthening community partnerships and convergence to achieve carbon neutrality and sustainable development.

Background

Rural schools in India face pressing environmental challenges such as water scarcity, waste mismanagement, and energy inefficiency. Over 70% of rural households depend on agriculture, making these issues critical to their livelihoods. Climate change exacerbates these challenges, with studies showing that rising temperatures could decrease crop yields by up to 25% in affected areas.

Schools, as the first institutions shaping young minds, serve as catalysts for fostering environmental sensitivity. Notably, an additional year of education increases climate awareness by 8.6%, as highlighted by the World Bank. Gen Z, the next generation of future warriors, will play a critical role in laying the foundation for environmental stewardship over the next 20 years. Inspired by global and national climate goals, the Carbon Neutral School Initiative bridges the gap between awareness and action by integrating climate-smart solutions into schools, ensuring education becomes a driver of sustainability and resilience.

Justification

Climate education receives less than 1.3% of climate finance globally, despite its critical role in driving sustainability.

India's 12 lakh government schools offer immense potential to influence young minds and communities. Schools are key platforms for fostering circular economies through sustainable resource use, reducing waste, and promoting reuse. With 60% of 15th Finance Commission funds allocated to water and sanitation infrastructure, significant opportunities for green transformations exist. The Carbon Neutral School Initiative aligns with NEP (National Education Policy) 2020, Mission LiFE (Lifestyle for Environment), and the global and local SDGs (Sustainable Development Goals), addressing critical environmental issues, building resilience, and empowering students to drive both local and global sustainability efforts.

Description of the initiative

The Carbon Neutral School Initiative is built on three pillars: **Green Curriculum, Green Infrastructure, and Green Action**, forming a comprehensive approach to transforming schools into sustainable hubs.

GREEN CURRICULUM:

- 1. Environment education themes are integrated into school curricula, aligning with subjects such as science, geography, and civics.
- 2. Interactive and experiential learning modules engage students through storytelling, live action initiatives, and project-based learning.
- 3. Students gain hands-on experience, such as designing solar-powered models to learn about renewable energy or creating recycling systems for waste management.
- 4. Teachers are trained and certified to deliver these modules effectively using learning-by-doing and playway methodologies.

GREEN INFRASTRUCTURE

Schools adopt eco-friendly infrastructure to minimize their environmental footprint driven by local governance of the panchayat. Key initiatives include:

Renewable Energy Systems: Installing solar panels to reduce dependency on non-renewable sources.

Water Conservation: Implementing rainwater harvesting and greywater recycling systems to address water scarcity.

Waste Management: Setting up composting pits and segregated waste collection points to encourage recycling.

Green Spaces: Developing kitchen gardens and planting native tree species to enhance biodiversity and provide practical learning spaces for students.

GREEN ACTION

As Eco Clubs are mandate under Samagra Shikhsa, they take the lead in organizing student led hands-on activities, empowering students to implement sustainability practices. Activities include for eg:

- 1. Conducting tree plantation drives to combat deforestation
- 2. Organizing awareness campaigns for plastic-free villages etc.
- 3. Designing and maintaining biodiversity maps for their local areas.
- 4. Promote experiential learning by designing creative projects for Grade 5+ students

Community engagement is central to these actions, with students collaborating with parents, local leaders, and government bodies to drive broader impact.

MONITORING AND EVALUATION

Progress is tracked through measurable outcomes, some of them including:

- 1. Reduction in carbon emissions through energy savings, water conservation and waste reduction through school auditing process.
- 2. Number of trees planted, and area covered under green spaces.
- 3. Increase in students' climate literacy and their capacity to lead local environmental initiatives.
- 4. Number of green infrastructures such as rainwater harvesting, compost pits, soak pits etc.

Theory of change

The Carbon Neutral School Initiative operates on the principle that schools are catalysts for systemic change. By equipping students and educators with the tools for sustainability, the initiative:

Increases Climate Literacy: Embedding climate education into the curriculum builds foundational awareness.

Fosters Behavioural Change: Hands-on projects encourage eco-friendly habits in students, which extend to their families.

Catalyzes Community Action: Through student-led campaigns and community collaboration, schools become hubs for local climate action.

Achieves Measurable Impact: By adopting green practices, schools directly reduce their carbon footprints, contributing to larger climate goals.

Data from the World Bank reveals that education increases climate awareness by 8.6% per additional year of schooling. This initiative leverages this potential to create a ripple effect of sustainability within communities, empowering students as change agents.

Learnings and challenges

KEY FINDINGS

Baseline Survey conducted by us: A survey of 390 schools across 9 states revealed:

- 73% of teachers are not trained in environmental education.
- 71% of schools lack active student-led eco-clubs.
- 78% of schools do not have rainwater harvesting structures.

LEARNINGS & INITIATIVES

Convergence and Collaboration: Aligning schemes and leveraging relationships among stakeholders have proven essential for achieving last-mile impact.

Innovative Curriculum: Deployment of 10 modules focused on activity-based themes has fostered hands-on learning and student engagement.

Green Educators: A pilot in Nuh district, one of India's lowest-ranked aspirational districts, resulted in the orientation, handholding, and certification of 120 Green Educators through knowledge partners.

Onground activated Eco clubs: 230+ Ecoclubs activated and strengthened resulted in active student led initiatives at school and community level.

Environmental BaLA: A 22000 sq feet utilised in 60+ schools building gamed based Environmental BaLA (Building an Learning Aid) and set up behaviour change tools like Snake & Ladders to nudge the adoption of positive environment practices.

Green spaces: Set up botanical and kitchen gardens in 25+ schools by nudging the government funds under eco club, promoted the practices of compost pits and usage of fruits and veggies in the daily mid-day meal.

Environmental Fests: District-level environmental fests created excitement and heightened climate sensitivity, with 500+ students from 53 schools demonstrating over 105 projects.

CHALLENGES

Panchayat Engagement: Panchayats often lack the awareness and motivation to drive climate initiatives.

Ownership Issues: Ensuring local ownership of projects remains a hurdle despite available funds and potential.

Resource and Infrastructure Gaps: Rural schools face significant resource constraints, limiting their capacity to adopt green practices.

Despite these challenges, the initiative continues to refine strategies and scale its impact, focusing on partnerships and innovative solutions to drive meaningful change.

Contribution to Climate Education

The initiative transforms schools into living laboratories for sustainability, contributing to climate education in the following ways:

Skill Development: Equips students with practical skills in waste management, energy efficiency, and sustainable agriculture, empowering them to apply these concepts in real-life scenarios.

Policy Alignment: Supports India's NEP 2020, Mission LiFE, and the SDGs by fostering experiential and inclusive learning that bridges theory and practice.

Scalable Framework: Offers a replicable model for integrating climate-smart solutions into education systems nationwide, tailored to meet local SDGs and environmental needs.

Infrastructure and Curriculum: Integrates green infrastructure—such as rainwater harvesting systems and renewable energy—with activity-based curricula designed to promote environmental stewardship.

Global and Local Impact: Addresses the green skills gap by preparing students for emerging job markets in sustainability while enhancing community resilience through localized environmental initiatives.

By combining curriculum innovation, infrastructure panchayat (local governance) led support, and actionable projects, the initiative ensures that future generations are equipped to lead climate action, positioning schools as epicenters of community resilience and sustainability.

Adv. Abhishek Kumar Founder and Curator of The Sangyan

Ar. Kavya Poornamia BalajepalliFounder and Curator
of Poornamidam

SECTION

DETAILS

Name

Universally Accessible Education for Inclusive Climate Action [For the 'Common Concerns of Humankind': Let's 'Build Forward Better' Where 'We All Belong'!] by Poornamidam and The Sangyan.

Aims and objective

- Inclusive Climate Education
- Inclusive Climate Education Curriculum
- Inclusive Climate Education Resources and Materials
- Inclusive Climate Education Institutions and Educators (Sign Language Interpretators
- Climate Resilient and Universally Accessible Built Educational Infrastructure
- Digitally Accessible Educational Infrastructure

Background

Climate change is a 'threat multiplier' with cascading effects that disproportionately impact vulnerable communities, especially persons with disabilities. Despite contributing the least, they face greater risks due to increased exposure, sensitivity, and limited ability to adapt. They are at the forefront of climate-induced disasters, experiencing impacts on health, accessibility, displacement, and violence. However, exclusionary and eco-ableist responses often overlook their needs for accessibility, reasonable accommodation, and early warning systems. Addressing these gaps is essential for a climate-resilient, inclusive, and sustainable world that 'leaves no one behind.'

Justification

"One year of schooling increases climate awareness by 9%", finds the World Bank Education's Report that explores how education is one of our most powerful tools in the fight against climate change. Children, youth and women with disabilities are the most excluded from the education system and thus, constitute one of the most disproportionately affected vulnerable communities by climate change adverse impacts.

Education empowers, equips, and skills people for climate mitigation, adaptation, and resilience. At the same time, climate change-induced heat and extreme weather events are significantly disrupting learning, and low-income countries and vulnerable communities are disproportionately affected. The world must act now to adapt education systems for climate change. Our formal and informal knowledge systems must be inclusive and universally accessible to ensure we 'leave no one behind' in climate action (SDG 4, 10 and 13).

In that contextual background, inclusive climate education is the sine qua non to achieve inclusive climate action.

Description of project / activity

Data-driven and evidence-based research, advocacy, and campaigns endeavour on the theme of the convergence of inclusion and sustainability, wherein we explored the intersectionality of climate change and disability and the need for universally accessible climate action and disaster risk reduction by way of ensuring inclusive climate action.

Given the IPCC's mantra that the "best way to give effective and lasting protection from climate chaos is through action that addresses inequities such as those based on gender, ethnicity, disability, age, location, and income", and our endeavour strives to trigger, catalyze and nudge inclusive and sustainable change by fighting inequality from the vantage point of the capability approach.

We are using inclusive climate education as a platform/tool/medium to "empower" persons with disabilities among other vulnerable communities (by employing and adopting Participatory Climate Action and Locally-led Community-Based Adaptation to Climate Change using Indigenous and Traditional Knowledge Systems), in order to, have access to information, knowledge and other necessary aspects to mitigate and adapt to the impacts of the climate change crisis and become climate-resilient without losing their agency.

Theory of Change

Our interventions aim to achieve a universally accessible and disability-inclusive approach to climate action and education, addressing the disproportionate impacts of climate change on persons with disabilities. By conducting data-driven research, advocacy, and campaigns, we have identified gaps in climate action infrastructure and frameworks and emphasize the need for disability-inclusive strategies. Our efforts focus on raising awareness, influencing policies, and fostering capacity-building through partnerships with academic institutions, governments, and international platforms.

By advocating for the inclusion of disability perspectives in educational curricula and environmental policies, we seek to empower vulnerable communities with knowledge, tools, and skills for climate mitigation, adaptation, and resilience. Our curated lexicons, infographics and digital content, games, guest lectures, and outreach activities disseminate critical concepts to broaden understanding and accessibility of climate education.

These interventions drive systemic change by embedding universal design principles and inclusive practices within policy, education, and advocacy frameworks. Through collaborative advocacy with entities such as the UGC, Council of Architecture, and DEPwD, we aim to institutionalize inclusion, fostering environments where all individuals, regardless of disability, can contribute to and benefit from climate resilience initiatives. This ripple effect strengthens communities' capacities to tackle climate challenges, ensuring no one is left behind in achieving sustainable development goals (SDGs 4, 10, and 13).

Learnings and Challenges

KEY FINDINGS

- Disability-inclusion an afterthought
- Eco-ableist approach to climate education

KEY LEARNINGS

- Disability-Inclusion ensures Universal Design for Learning (UDL) is an educational framework that helps create learning environments that are inclusive and accessible to all learners.
- It's not sustainable unless it's universally accessible.
- Inclusive Education is at the core of achieving Inclusive Climate Action.

KEY CHALLENGES

- Inclusive Climate Education Budgeting
- Digital Inaccessibility
- Mainstreaming disability inclusion within climate education and vice versa

Contribution

Our initiative contributes to the field of climate education by emphasizing inclusivity, accessibility, and the intersectionality of climate change impacts on vulnerable communities, particularly persons with disabilities. Recognizing that education is a powerful tool for climate mitigation, adaptation, and resilience, we strive to make climate education universally accessible and aligned with the principles of "leave no one behind" and "universal design of learning."

Through data-driven research, evidence-based advocacy, and innovative campaigns, we address gaps in climate education frameworks. Our efforts include curating lexicons and concept series to simplify complex jargon, enabling broader understanding and participation. We advocate for the inclusion of disability perspectives in educational curricula, emphasizing the unique vulnerabilities and contributions of persons with disabilities to climate resilience. Our work at the intersection of climate and disability extends to capacity-building initiatives, guest lectures, and collaborations with global platforms like UNICEF, UN Women, and academic institutions. These efforts amplify the voices of marginalized communities and foster inclusive policy development.

By institutionalizing disability-inclusive climate education, we equip communities with knowledge and skills to address climate challenges. This ensures a more equitable, sustainable, and resilient future where all individuals, regardless of ability, can contribute meaningfully to global climate action.



Inaugural



Showcase presentation



Registration



Climate games



CEN team



Cimate games



Swarathma audience reaction



www.thecen.in







www.youtube.com/@ClimateEducatorsNetwork

