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Educational Climate Resilience Institute of Chile



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3rd International Conference on Education for Climate Change and Sustainable Development: Urgent Action for Climate Transformation June 22-24, 2021

PROGRAM

Tuesday June 22 nd		Description
09:00–09:05 AM	Introduction	
9:05–9:20	Welcome	The main organizers and sponsors of this event welcome guests and comment on the challenges that must be addressed by the educational sphere to confront the climate emergency.
	<ul style="list-style-type: none"> Words from the University President, Dr. Ennio Vivaldi, President, Universidad de Chile. 	
	<ul style="list-style-type: none"> Words from the Chilean Minister of Education, Mr. Raúl Figueroa Words from the German Ambassador in Chile, Dr. Christian Hellbach. 	
09:20–10:00	Conference: The Urgency of Climate Change Action and Its Impacts on Humanity <ul style="list-style-type: none"> Pierre Léna, Founding Member, Office for Climate Education, Paris, France. 	If climate is understood a “systemic issue” that considers Earth as a whole, how should schools be prepared to teach about climate change from a systemic perspective?
10:05–11:30	Master Class: Study of Lessons Learned to Strengthen Teaching Competencies in Climate Change Education <ul style="list-style-type: none"> Roberto Araya, Professor/Researcher, CIAE – Universidad de Chile. Pedro Collanqui, Specialist in Curricular Development, Pedagogical Coordinator of the Directorate of Secondary Education, Ministry of Education, Peru. 	We will learn about best practices in teaching and learning with respect to integrated STEM (Science Technology Engineering Math), measured in terms of impact.
11:40–12:35 PM	Panel: Building STEAM Territories: Teachers’ Role in Climate Change Education Panelists: <ul style="list-style-type: none"> Badin Borde, Project Manager, Siemens Stiftung Foundation, Germany. Natalie Nicetto, Project Manager, OCE - Paris. Andrés Muñoz, Advisor to the Directorate of Science, Technology, and Educational Media, Bogota Department of Education, Colombia. 	We will hear about how the systemic vision of climate change education in collaboration with all local players helps broaden the horizon and opportunities for the teaching practice.



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12:35–1:00	Webinar: Water Resources <ul style="list-style-type: none"> Ariel Muñoz, Principal Investigator, Dendrochronology and Environmental Studies Laboratory, Pontificia Universidad Católica de Valparaíso, Chile. Camila Álvarez, Associate Researcher, Center for Climate and Resilience Research (CR)2, Chile. 	The integration of water resources as a fundamental issue in educational programs, from preschool to high school, is considered an important component of the water education agenda. In this webinar, we will learn about the actions aimed at carrying out this task.
BREAK		
3:00–3:25	Webinar: Climate and Cryosphere <ul style="list-style-type: none"> Gino Casassa, PhD in Glaciology, Head of the Glaciology and Snow Unit, DGA - Ministry of Public Works, Chile. 	The cryosphere refers to the planet's frozen components above or below the land and ocean surface. We will learn about its role in the global climate system and the climate emergency.
3:25–4:00	Webinar: Atmosphere <ul style="list-style-type: none"> Macarena Valdés, Associate Lecturer, Department of Epidemiology, School of Health, Universidad de Chile. Eugenia Gayó, Researcher, Center for Climate and Resilience Research (CR)2, Chile. 	The involvement of the educational community in understanding the role of the atmosphere in climate change and air quality problems affecting Latin American cities can also get students and teachers involved in scientific learning and the search for solutions.
4:05–4:30	Webinar: Lithosphere <ul style="list-style-type: none"> Rocío Urrutia, Adjunct Researcher, Center for Climate and Resilience Research (CR)2, Chile. Susana Gómez, Professor, Department of Biology, Universidad de Cádiz – Spain. 	In this talk, we will learn about how the solid surface layer of the planet, known as the lithosphere, is affected by the climate emergency, and the key factors for involving the educational communities in this knowledge.



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Wednesday June 23 rd		Description
9:00–9:02 AM	Introduction	
9:02–9:15	Keynote Address: STEM Education and Climate Change <ul style="list-style-type: none"> Dr. Nina Smidt, Managing Director, Siemens Stiftung International Foundation, Germany. 	We are already seeing the consequences of climate change: flooding, droughts, and other extreme meteorological events are now a part of our everyday lives. How can we address this reality from the perspective of STEM education?
9:15–10:00	Conference: Nature as a Unit. Alexander von Humboldt and Francisco José de Caldas: Contributions from Latin America to the World <ul style="list-style-type: none"> Andrés Villegas, Professor, Universidad de La Sabana, Colombia. 	We will learn about how the past connects to the present through the incredible experiences of these historical naturalists, whose research and ways of seeing the world are now more relevant than ever.
10:05–11:30	Master Class Educating Young People to Create Solutions to Climate Change and Other Global Challenges – Design Thinking in STEM <ul style="list-style-type: none"> Christine Niewoehner, STEM and Creativity, Design Thinking, Climate Change Education, Siemens Stiftung International Foundation, Germany. Mariano Alesandro, The Index Project, Denmark. 	Design Thinking is a creative method to make complex problems more tangible and develop adequate solutions in several iterative steps. This methodology can be used to address climate change and sustainability by sharing thoughts, developing ideas in collaboration, and focusing on specific local needs.
11:30–12:00	Webinar: Research for Decision-Making on Climate Change <ul style="list-style-type: none"> Elizabeth Silvestre Espinoza, Director of Research and Projects, INCLIMA, Lima, Peru. 	We will learn of the impact and measures to adapt to Climate Change in vulnerable areas of Peru, based on local perceptions and their relationship to science.
12:00–12:30 PM	Webinar: Biodesign as a STEAM Project in Schools <ul style="list-style-type: none"> Giovanna Danies, Director of the Atarraya Program, Universidad de Los Andes, Bogota, Colombia. 	From Colombia, we will learn about “Biodesign”: Design Thinking for the formulation of projects to resolve challenges based on the Sustainable Development Goals, incorporating biotechnology and biomimetics.
12:30–1:00	Webinar: Small Research Projects for Climate Change Education <ul style="list-style-type: none"> Jorge Allende, President, Allende Connelly Foundation, Chile. Paula Cramer, Head of RELAB Science Clubs, Argentina. 	We will hear about different experiences, including how science clubs have developed young people's skills in applying the scientific method to discover responses to the challenges of the climate emergency.

BREAK



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3:00–3:30	<p>Webinar: Biodiversity and Cultural Knowledge</p> <ul style="list-style-type: none"> Nascira Ramia, Director of the Education Program, College of Social Sciences and Humanities, Universidad San Francisco de Quito, Ecuador. 	<p>From a teaching perspective, pluralist and inclusive alternatives for intercultural education can be designed so that traditional knowledge can be interwoven with scientific-technological teaching. In this talk, we will learn about local adaptation measures that have proven successful and have been able to adequately respond to climate change.</p>
3:30–4:30	<p>Panel: Educational Public Policy and Professional Teacher Training for Sustainable Development</p> <p>Panelists:</p> <ul style="list-style-type: none"> Cristina Dorador, PhD in Science, Representative of Universidad de Antofagasta, Chile. Corina González, Lecturer, Pontificia Universidad Católica de Valparaíso, Chile. Ana María Loose, Director of Ecology Project Galapagos, Ecuador. Richard Knab, Director of Strategic Alliances, Galapagos Conservancy. María Luisa Buitrón. 	<p>Concern for climate change is a matter that requires a commitment in public policy to achieve a real impact within the educational system. At this time, we will learn about three experiences in Latin America.</p>



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Thursday June 24 th		Description
9:00–9:02 AM	Introduction	
9:02–09:15	Keynote Address: Climate Change and Pandemic: New Challenges for Education in Latin America <ul style="list-style-type: none"> Claudia Uribe, Director of the UNESCO Regional Bureau for Education in Latin America and the Caribbean (OREALC/UNESCO Santiago). 	The climate emergency and pandemic are changing the paradigms of our relationship to the environment. From an educational perspective, there is the challenge of addressing these changes when thinking about education during the coming years.
9:15–10:00	Panel: Citizen Science for Sustainability <ul style="list-style-type: none"> Juan Felipe Restrepo Mesa, Head of Knowledge Management and Environmental Coordinator, Colegio Montessori de Cartagena. Cartagena de Indias, Colombia. Martin Thiel, Professor, Faculty of Ocean Sciences, Universidad Católica del Norte, Chile. 	Citizen science looks to actively open up the entire scientific research process to the community to create horizontal relations. From an educational perspective, we will learn about successful experiences of citizen science linked to environmental education.
10:05–11:30	Master Class: Project-Based Learning and Its Application to Climate Change Education <ul style="list-style-type: none"> Jeannette LaFors, Director, Expert on Project-Based Learning, Director of Kelefors Consulting. 	The PBL methodology is linked to local issues and the design of solutions, which makes for an interesting alternative to get students involved in topics related to climate change.
11:30–12:00	Webinar: Nature, Art, and Science. <ul style="list-style-type: none"> Cecilia Bravo, Director of Art & Innovation, Teatro del Lago Foundation, Chile. 	Several years ago, “STEM” education was changed to “STEAM” education, with the important letter A referring to the arts. If we also add in the connection to nature, we will have a beautiful opportunity for teaching about climate challenges from an integral perspective.
12:00–12:30 PM	Webinar: Sustainable Development Goals for Latin America and the Caribbean – Challenges for Universities and Communities in the Region <ul style="list-style-type: none"> Felipe Castro, Executive Director of the Center of Sustainable Development Goals for Latin America, Universidad de Los Andes, Colombia. 	The 2030 Agenda for Sustainable Development establishes a transformational vision towards economic, social, and environmental sustainability. Today, this agenda serves as a guide for designing actions at the academic and community level.



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12:30–1:00	<p>Panel: Young People for Climate Change</p> <p>Panelists:</p> <ul style="list-style-type: none"> Adriana Valenzuela, Manager of the Youth Leadership Program, Global Center on Adaptation. Rotterdam, Holland. Isabella Villanueva, President, CEUS, Universidad de Chile. Waldo Soto, Director, 2811. 	<p>Climate change is humanity's greatest challenge during the 21st century. To achieve long-term changes on a planet with 7 billion inhabitants, this process must be led by the newer generations. How can this be done? That is what we will discuss in this panel.</p>
BREAK		
3:00–3:30	<p>Webinar: Rethinking Environmental Education for the Present and Future of Schools</p> <ul style="list-style-type: none"> Barbara Von Igel, Environmental Specialist, Division of Environmental and Civic Education, Ministry of the Environment, Chile. 	<p>The risk represented by the effects of climate change cover multiple dimensions of the planet and life, and educational communities must actively address this in their curricula to raise awareness among young people. How can we provide guidelines and tools to integrate this topic within the educational context?</p>
3:30–4:00	<p>Webinar: RedLAMA, Educational Resources on Climate Change</p> <ul style="list-style-type: none"> Javier Romero, Sociologist, Universidad de Chile, Member of RedLAMA. Catalina Muñoz, Anthropologist, Universidad de Chile, Member of RedLAMA. Rocío Lecaros, Geographer, Universidad de Chile, Collaborator of RedLAMA. 	<p>Climate change education requires teaching methodologies and resources to cover the multiple areas of knowledge involved. We will learn about important developments that serve as a guide for those wanting to work with educational resources in this area.</p>
4:00–4:30	<p>Conclusions and Closing</p> <ul style="list-style-type: none"> Pilar Reyes, Managing Director, Inquiry-Based Science Education Program, Universidad de Chile. Ulrike Wahl, Representative, Siemens Stiftung Foundation in Latin America. Macarena Troncoso, Coordinator of RedLAMA. Official Closing, Paola Pino, Communications Manager, Siemens Stiftung Latin America. 	