

International Symposium EDUCATION, MINING and CLIMATE CHANGE

7 - 10 november, 2022



International Symposium Education, Mining and Climate Change

Scientists, activists, NGOs, Indigenous and traditional communities all over the world have been warning about the intensification and consequences of **climate change**. These consequences are already being felt in extreme weather events such as intense rainfalls, floods, heat waves, prolonged droughts and massive fires that have caused deaths and affected the health, access to water and food security of thousands of people. Situations like this intensify environmental and climatic injustices. Those most affected around the world are the populations that are already experiencing socio-economic vulnerability. In this context, **mining** is an activity that cries out for greater attention because it both affects and is affected by climate change.

Although it is common for large extractive corporations to publicize their use of water technologies that recycle and make claims that they strive to reduce their greenhouse gas emissions, what we have experienced is ecosystems and waterways that have been devastated by mining. There have been more and more tailings dams collapses and an ongoing history of continuous rights violations by mining companies. With regard to rights violations, those most affected include Indigenous peoples, quilombolas (communities of former slaves in Brazil) and traditional communities. In all cases, women are affected most acutely.

Minas Gerais, a state of Brazil where the history of mining began 300 years ago, has suffered from a sequence of mining tailings dams collapses. Two of them rank among the biggest tailings dam breaches in the world. The collapse in 2015 occurred at the Samarco mine in the city of Mariana, jointly owned by Vale SA and BHP Billiton. The flow path moved along the 600 km of the Rio Doce river basin until it reached the sea, destroying diverse rural activities along the way. In addition, the dam collapse had a severe impact on the environment and disrupted supply chains using the Rio Doce waterway. Less than four years later, in 2019, the mining company, Vale S.A. was responsible for another crime-disaster in the city of Brumadinho. The sudden avalanche of contaminated mud from the up-stream dam killed 272 people and destroyed more than 300 km of the Paraopeba River.

Mining companies have much in common beyond enjoying impunity from the consequences of their actions. Another practice they have in common, carried out in Minas Gerais but also in other parts of the world, is incursions into the **schools**.

Mining company disseminate a discourse about development through mining. Their offers of “teaching-learning projects and activities for students” and “training” courses for teachers, serve to hide the impacts and the risks endemic to mining. Communities that are already socio-economically fragile with lives severely impacted by the economic activities brought by the mining projects are particularly vulnerable. In corporate language schools have become “*stakeholders*”, among other “interested parties”

International Symposium EDUCATION, MINING and CLIMATE CHANGE

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needing to be handled. Schools have therefore become the focus of mining companies for organized disinformation and alienation campaigns.

In November 2022, we are commemorating the 7th anniversary of the crime-desaster of Samarco, the Vale-BHP Billiton iron mine at Mariana. Through this symposium our hope is to share information, in addition to remembering past violations and impacts of mining on climate change. We also hope to discuss the importance of promoting critical education about mining.. An important point of reference in our discussions will be the Brazilian pedagogue and educator Paulo Freire, who taught about the importance of building societies where environmentl and climate justice prevail, and where it is possible for all to live with quality of life, in a dignified manner.

Organizing Institutions:

- **Education, Mining and Territory Research Group (Educação, Mineração e Território – EduMiTe)**, Federal University of Minas Gerais, Brazil. - [Site EduMiTe](#)
- **Queen Elizabeth Scholars** – Scholarship York University, Canada. - [QES Climate Justice](#)

Target audience:

Universities, research groups, community leaders, teachers, non-governmental organizations, activists from socio-environmental and human rights movements, Indigenous and traditional communities.

Free online event with a limited number of places

- Registration and issue of certificates via CENEX - IGC/UFGM
- Broadcast via Zoom with three translation channels: *Portuguese, English and Spanish.*

Date: November 7-10, 2022

Time schedule:

- **Brazil (Belo Horizonte):** 2 p.m. to 4 p.m
- **Canada (Toronto):** 12 p.m. to 2 p.m (Note change to EST)
- **El Salvador (San Salvador):** 11 a.m. to 1 p.m.
- **Ecuador (Quito):** 12 p.m. to 2 p.m
- **Spain (Madrid):** 6 p.m. to 8 p.m
- **Mozambique (Maputo):** 7 p.m. to 9 p.m

International Symposium EDUCATION, MINING and CLIMATE CHANGE

7 - 10 november, 2022



Schedule

■ Day 1 – November 7 (Monday)

EDUCATION AND MINING IN TIMES OF CLIMATE CHANGE

• OPENING PANEL

Dr Lussandra Gianasi – doctorate in Geography, Associate Professor, Department of Geografy, Geosciences Institute (IGC) at the Federal University of Minas Gerais (UFMG), Brazil) Coordinator of the Education, Mining and Territory Working Group - EduMiTe. (5 min) - [Site EduMiTe](#)

Dr Patrícia Ellie Perkins – Doctorate in Economics and Ecology (University of Toronto - Canadá), Professor, York University (Toronto, Canadá) e Coordinator Climate Justice Queen Elizabeth Scholars Program. (5 min) - [QES Climate Justice](#)

• PRESENTATIONS AND DEBATE

Moderator: Ana Flávia Quintão ([Cordilheira Institute/Brazil](#))

Ana Flávia Quintão is a biologist at UFMG (Brazil) with a doctorate from Fiocruz Minas (Brazil) on the topic of human vulnerability to climate changes. She is a member of the Movement to Save Gandarela Mountain and also of the Cordilheira Institute, in addition to being a parliamentary advisor.

Themes and presenters

- The modus operandi of mining in educations: schools as stakeholder

Daniela Campolina (Brazil) – MA and PhD in Education (UFMG-Brazil) with a post-doctoral exchange at York University (Canadá), basic education teacher and activist in the Movement to Save Gandarela Mountain and the Movement for Mountains and Water in Minas Gerais, member of the Cordilheira Institute e Co-coordinator of EduMiTe. (15 min)

- The influência of mining on schools in África

Germano Brujane (Mozambique) – geographer and researcher in Kuwuka – Youth, Development and Environmental Advocacy. (15 min) - [Site KUWUKA JDA](#)

- Popular Education Networks: Chasqui Warmi Caravan – Women Messengers for a Mining-free Ecuador

Ivonne Ramos (Ecuador) – Sociologist and educator, activist for environmental and social rights

International Symposium EDUCATION, MINING and CLIMATE CHANGE

7 - 10 november, 2022



for Indigenous, traditional and Afro-descendent communities in Ecuador with more than 20 years of experience in working directly with these communities, member of Ecological Action, founder of the networks Caminhantes and Sanadoras/Saramanta Warmikuna. (15 min) - [Site Saramanta Warmikuna](#)

■ Day 2 - November 8 (Tuesday)

MINING AND CLIMATE CHANGE: GLOBAL PANORAMA

• OPENING PANEL

Education, Mining and Territory Working Group - EduMiTe

• PRESENTATIONS AND DEBATE

Moderator: Bruno Milanez (PoEMAS/Brazil) - [Site PoEMAS](#)

Bruno Milanez (Brazil): Building Engineer, PhD in Environmental Policy (Lincoln University - New Zealand), Associate Professor, Federal University of Juiz de Fora, Department of Building and Mechanical Engineering and Post-graduate studies in Geography. He also coordinates a research and extension working group called PoEMAS (Politics, Economy, Mining, Environment and Society).

Themes and Presenters

- Impacts of Mining on Climate Changes: the Brazilian case (Brazil)

Athayde Motta (Brazil) – MA in Anthropology, University of Texas (USA) and general director of IBASE (Brazilian Institute for Social and Economic Analyses). (15 min) - [Site Ibase](#)

- Water insecurity and mining – the case of the Iron Aquifer Quadrilateral in Minas Gerais (Brazil)

Paulo Rodrigues (Brazil) – Geologist, PhD in Minerology/Geology from Johannes Gutenberg University (Germany), researcher in the Center for Development of Nuclear Technology (CDTN) and EduMiTe. (15min) - [Site EduMiTe](#)

- Artesanal miners and rights violations in the Amazon (Brazil)

Maurício Ye'kwana (Brazil) – Director of Hutukara Association Yanomami and spokes-person for the Campaign #OutWithGarimpoOutWithCovid in the Brazilian Amazon. (15min) - [Site Hutukara](#)

International Symposium EDUCATION, MINING and CLIMATE CHANGE

7 - 10 november, 2022



- ObservA no contexto africano: Observatório Ambiental para Mudanças Climáticas

Dr. José Maria do Rosário Chilaúle Langa (Mozambique) – Professor of Geography (Eduardo Mondlane University, Mozambique), MA and PhD from UNESP, Brazil, founder of Observatory on Environment and Climate changes - ObservA. (15 min)

■ Day 3 – November 9 (Wednesday)

CITIZEN SCIENCE AND CREATION OF NETWORKS TO BUILD CLIMATE JUSTICE

• OPENING PANEL

Education, Mining and Territory Working Group - EduMiTe

• PRESENTATIONS AND DEBATE

Moderator: Felipe Fonseca (Pristino Institute/Brazil) - [Site Instituto Prístino](#)

Felipe Fonseca (Brazil): Biologist, MSc in Ecology, Conservation and Forest Management (UFMG-Brazil). Coordinator of Environment Education and Science Communication, Pristino Institute.

Themes and Presenters

- Queen Elizabeth Scholars Global Network Climate Justice

Dr. Ellie Perkins (Canadá) – doctorate in Economics and Ecology (University of Toronto - Canadá), Professor, York University (Toronto, Canadá) e Coordinator Climate Justice Queen Elizabeth Scholars Program. (15 min) - [QES Climate Justice](#)

- Mapping body and territory: knowledge and the importance of women in the fight for climate justice

Carmem Aliaga Monrroy (Bolívia) – Member of the CASA Collective and Coordinator of Socio-environmental Action in the Latin American Network of Women Defenders of Social and Environmental Rights.

Laura Sánchez Torres (Colômbia) – Political scientist currently doing her MA. Focus on the area of water as a common good in both the Censat Ague Viva and the Latin American Network of Women Defenders of Social and Environmental Rights.

(15min) - www.redlatinoamericanademujeres.org

International Symposium EDUCATION, MINING and CLIMATE CHANGE

7 - 10 november, 2022



- Confronting the Mining Discourse

Judith Marshall (Canada) – PhD in education from the University of Toronto, sociologist, educator, activist with a long history of involvement with miners and communities affected by mining. She worked in the Ministry of Education in post-independence Mozambique involved in workplace literacy. She also spent several decades based in the labour international development fund of the Canadian Steelworkers union where she coordinated member education on global issues and cooperation projects in southern Africa, many related to mining. After retirement she became an Associate of CERLAC (Centre for Research on Latin America and the Caribbean) at York University in Toronto. She was a founder and is still an active member of the International Articulation of People Affected by Vale. (15 min) - atingidosvale.com

- Role of public universities after disastrous mine tailing dam collapses in Minas Gerais (Brazil)

Dr. Andréa Zhouri (Brazil) – MA in Social Anthropology (Unicamp-Brazil) and PhD in Sociology from the University of Essex (England). Professor at the Federal University of Minas Gerais and coordinator of a Study Group on Environmental Themes. (15min) - [Site GESTA](#)

- Network for geoparticipatory monitoring, “What Kind of Muck Is This”; citizens’ science and community empowerment

Luciano Corrêa (Brazil) – Chemist licensed (UFMG-Brazil), basic education teacher, activist in both the Movement to Save Gandarela Mountain and the Movement for Mountains and Water in Minas Gerais. Also a researcher in EduMiTe. (15 min) - [Site “Que Lama é Essa?”](#)

■ Day 4 – November 10 (Thursday)

PATHS FOR CRITICAL EDUCATION IN THE FACE OF MINING

• OPENING PANEL

Education, Mining and Territory Working Group - EduMiTe

• PRESENTATIONS AND DEBATE

Moderator: Carla Wstane (Manuelzao Project, UFMG, Brazil) - [Site Manuelzão](#)

Carla Wstane (Brazil): Specialist in environment studies, MA from the Federal University of Minas Gerais and PhD (Federal University of Espírito Santo) with a thesis entitled “Geography, Space, Culture and Languages.” Projects Director, Guaicuy Institute/Manuelzao. Collaborator with the movement “Let Onca Drink Clean Water.”. Researcher on discourses produced about rivers. Involved in education,

International Symposium EDUCATION, MINING and CLIMATE CHANGE

7 - 10 november, 2022



mobilization and social participation in urban water management.

Themes and Presenters

- The importance of sharing teaching/learning experiences from and for basic education teachers in mining communities

Vanessa Macêdo (Brazil) – MA (UFPB-Brazil) and PhD (UFMG-Brazil) in education. Executive director of the publication “Brazilian Review of Basic Education”. (15 min) - [Special Edition Education and Mining Disasters](#)

- Ancestral knowledge: histories of women, resistance and popular education in the face of mining in Ecuador

María Blanca Chancoso Shánchez (Ecuador) – Indigenous leader, professor and member of the Sanadoras/ Saramanta Warmikuna network. Founder of the National Confederation of Indigenous Nationalities of Ecuador (CONAIE), Ex-president of ECUARUNARI (Confederation of Peoples of Kichwa Nationality) and also in the vanguard of campaigns in Ecuador for bilingual education and recognition of multiple nationalities. (15 min) - [Site Saramanta Warmikuna](#)

- Socio-scientific controversies and teacher training: deconstructing mining discourses

Luciana Resende Allain (Brazil) – Professor in the Department of Biological Sciences and the Post-graduate Program of Science, Mathematics and Technology Education at the Federal University of Vales do Jequitinhonha e Mucuri (UFVJM). **Publication of curriculum materials** “Socioscientific Questions and Mining: a guide for teachers, in partnership with the Education and Mining Observatory (ObEM/ EduMiTe). (15 min)

- EduMiTe Observatories: citizen’s science constructing networks of training, information and action

Daniela Campolina (Brazil) – MA and PhD in Education (UFMG-Brazil) with a post-doctoral exchange at York University (Canadá), basic education teacher and activist in the Movement to Save Gandarela Mountain and the Movement for Mountains and Water in Minas Gerais, member of the Cordilheira Institute e Co-coordinator of EduMiTe. (15 min) - [Site EduMiTe](#)

- **Presentation of EduMiTE Dam Bulletins**, from Observatory of Mining Dams;

- **Partnerships and positions of the Observatory on Education and Mining (ObEM);**

- **Campaign Launch:** “Introducing Women Educators in Territories Affected by Mining supported by Observatory Women and (R)existence to Mining.