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INTERNATIONAL WORKSHOP 2015

EDUCATION MEETS SCIENCE: BRINGING POLAR RESEARCH INTO THE CLASSROOMS

<u>Date:</u> Wednesday 1st -Saturday 4th 2015

Location: Freie Waldorfschule Hannover-Bothfeld

Weidkampshaide 17 D-30659 Hannover Germany

MAP:

https://www.google.com/maps/place/Freie+Waldorfschule+Hannover-Bothfeld/@52.4152926,9.7896833,13z/data=!4m2!3m1!1s0x47b00cf0825d15e3:0x239704d6cbc213ec

<u>Organizers:</u> Inga Beck (geb. May), Rainer Lehmann, José Xavier and Louise Huffman

Local student organizing committee: Caroline Brückner, Jule Bücking, Elske Düsenberg, Tabea May, Wiebke May, Tobias Much, Sebastian Preuth

Music: Lucatina Baruth

<u>Organizations</u>: Freie Waldorfschule Hannover-Bothfeld, Alfred Wegener Institute (AWI), Polar Educators International (PEI), University of Coimbra

<u>Endorsed by:</u> British Antarctic Survey (BAS), International Permafrost Association (IPA), Association of Polar Early Career Scientists (APECS), Scientific Committee on Antarctic Research (SCAR-CBET), International Arctic Science Committee (IASC), The Climate and Cryosphere (CliC), Deutsche Gesellschaft für Polarforschung (DGP), Coole Klassen, ICED (Integrating Climate and Ecosystem Dynamics of the Southern Ocean)

<u>Sponsored by:</u> Students on Ice, Alfred Wegener Institute, Deutsche Gesellschaft für Polarforschung (DGP)

<u>Directed to:</u> International teachers/educators (that have students between 6 and 19 years old)

Program

Program during the whole workshop:

- Photo exhibition Antarctica (Melanie Hubach)
- Poster exhibition (Showing activities / events of Polar Teachers)
- Polar drawing exhibition of students

Wednesday 04-01-2015

15.00 -17.00	Closed Meetings (PEI, Coole Klassen)		
17.00 -18.00	Registration		
	Icebreaker		
	(for participations, students, teachers and parents of the school)		
	Welcome word from the school's representative		
18.00 -19.00	Public Talk		
	Antony Jinman: trips to the North- and South Poles		
19.00	Finger Food		

Thursday 04-02-2015:

TOPIC OF THE DAY: GEOSCIENCE AND BIOLOGY IN POLAR REGIONS

8:30 - 9.00	Registration—Hang posters in assigned places			
9.00 - 9.30	Welcome: Inga Beck, Rainer Lehmann, Jose Xavier & Louise Huffman			
Lectures				
9.30 - 10.00	Arctic warming and its impact on glaciers, sea ice and permafrost			
	(Hans-Wolfgang Hubberten)			
10.30 - 10.45	Biology in Polar Regions (Jose Xavier)			
10.45 – 11-00	Laymen and school kids monitor glad			
11.00 - 11.10	Introduction to Education through Expedition (Antony Jinman)			
11.10 – 11.30	Coffee break/visit posters			
11.30 – 11.45	Introduction PEI (Louise Huffman, Gary Wesche, Matteo Cattadori)			
Educators Talks				
11.45 – 13.00	 1145 Gary Wesche: Researchers Experiences – gentoo penguins 1200 John Wood: Exploring Patterns of Soil Organic Matter Decomposition with Students and the Public through the Global Decomposition Project (GDP) 1215 Markus Eugster & Elena Sparrow: GLOBE – Seasonal Changes in Polar and Other Regions 1230 Ekaterina Sleptsova: Projects from Belogorskaya 			
13.00 – 14.00	Lunch/visit posters	Site meeting ICARP III with IASC		
Hand-on activities				
14.00 – 15:15	Nature of Science: Hypothesis Card Game (Louise Huffman) Activities from IPY Glacier activities (Louise Huffman & Dave Grant)			
15.15 – 15.30	Coffee Break			
15.30 – 17.00	Eco-chains Arctic Crisis and SMARCTI	C (Elena Sparrow)		
Discussion/ Panel				
17.00 – 17.30	How can we establish a system to evaluate our work with polar			
	education? How can we see and measure the outcomes?			
18.30	Dinner at local restaurant			

Friday 04-03-2015

TOPIC OF THE DAY: CLIMATE AND SOCIETY IN POLAR REGIONS

6:45-8:00	!!!Fun Run (Walk)—5K!!!! (for all participants & volunteers!!)		
Lectures			
9:00 - 9.30	Antarctica matters to everyone (Peter Clarkson)		
9.30 - 10.00	Climate Change in the Polar Regions (David Carlson)		
10.00 - 10.15	Arctic societies and cultures (Gerlis Fugmann)		
10.15 - 10.30	Introduction Coole Klassen (Rainer Lehmann & Franz Tessensohn)		
10.30 – 10.45	Introduction to the International Polar Foundation (Liz Pasteur)		
10. 45 – 11.10	Coffee break/visit posters		
Educators Talks			
11.10 – 12.30	1130 Lise Fivez: Outdoor Education and Traditional Knowledge: A match made in heaven?		
	1145 Patricia Azinhaga & Jose Xavier: Polar Scientist and Education		
	PROPOLAR educational programs		
	1200 Caitlin Munroe, Samuel Allsup, Blair Rice: Outreach partnership		
	between two high school students and a local elementary school		
	1215 Janet Warburton and Sarah Bartholow: Best practices of teacher		
	field experience programs		
12:30 – 12:45	How to freeze water in 20 seconds (Tabea May, Sebastian Preuth: students)		
12.45 – 13.00	Outcomes ICARP III site meeting (Inga Beck)		
13.00 – 14.00	Lunch/visit posters		
14.00-14.45	Poster Session—talk to the authors of the posters		
Hands-on activities			
14.45 – 16.15	Climate Misconceptions Matching (Louise Huffman)		
	Invent-a-Word (Louise Huffman)		
	Equipment from an Icebreaker (Gerto Bal)		
16.15 – 16.30	Coffee Break		
	Discussion/ Panel		
16.30 - 17.30	Polar Education: Where do we go from here and how do we know when		
	we get there?		
17.30 – 18.00	Wrap up / Closing Ceremony/take down posters		
18.30	An evening with Students on Ice:		
	Barbeque		
	SOI activity STUDENTS ON ICE		



Raffle

Saturday 04-04-2015

Local excursion about ice aged periglacial features in the surrounding of Hannover organized by Rainer Lehmann

Poster presentations:

Last Name	First Name	Poster Title
		A Teacher on the Ice: From classroom to
Alessia	Cicconi	Antarctica and back
Apostolova	Denitsa	APECS Bulgaria
		Authentic Teaching and the Lifelong Impact on
Bal	Gerto	Children
Beltrami	Maria Laura	Scienze Polari
Calabretta	Maria	Teaching polar science to primary students
Djordjeivc	Manojle	
Ferdorov	Eugene	Arctic projects of the Republic of Sakha (Yakutia)
Kaiser	Wiebke	The Lena River Delta Expedition
Nikolaeva	Anna	International Arctic Centre of Culture and Arts
		From science classroom to the Arctic: my
Realdon	Giulia	experience as a "Teacher at Sea"
Samuelson	Kyle	Robotics in Extreme Environments
Schmoker	Bill	Bringing Polar Experiences Back to the Classroom
Snowball	Minnie Molly	Youth Arctic Coalition
Silowball	IVIIIIIIE IVIOIIY	GAIA - Antarctic an educational model of
Soto Ortega	Alfredo	Antarctic culture in Chile
		The school project - Maritime Centre Elbe
Treffeisen	Renate	Islands (MZE)
		Polar Science - Designing a High School Science
Williams	Cheryl	Course



PEI 2015 Hannover www.polareducator.org



PEI 2015 Hannover

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Hannover GERMANY

- + Workshops
- + Masterclasses
- + Conferences
- + Snap Talks
- + Movie Show
- + Poster Exhibition



Colaborate

Improve Support scientists in

increasing public

communication skills

Promote collaborations between educators and scientists



Discuss

Discuss the future vision of Polar **Educators International**



Update

Update and exchange key information with polar educators

Registration

Make your registration www.polareducator.org/news/pei

15 December 2014

Organizations

























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