

WP2– Scientific coordination, mentoring and education



Terry Callaghan



Aim of the Work Package

The overall aim of this work package is to communicate INTERACT activities within and outside the consortium by developing and applying new resources including human resources and resources for education at all levels.

The specific aims of this work package are:

- To coordinate the communication of the science within the infrastructure to external stakeholders and vice versa, and to foster international collaboration
- To promote Arctic and climate change issues in school and university education and to provide appropriate resources



Progress since last meeting

D2.4 3rd CAWI (Computer-Assisted Web Interviewing) survey report (PAS)

- For this CAWI survey, a special group of teachers were addressed: SCIENTIX ambassadors representing five countries.
- Scientix promotes and supports a Europe-wide collaboration among STEM (science, technology, engineering and maths) teachers, education researchers, policymakers and other STEM education professionals.
- Activities based on inquiry methods, dialogues, discussion and collaborative working are frequently recommended in European school systems.



Progress since last meeting

D2.5 Recommendations to authors of educational resources (PAS)

Every author of educational resources should begin with a set of answers to basic questions:

WHO the users will be

Age of target group, possible language barriers etc.

WHERE the materials will be used

Will it be in a lecture, classroom, or homework

WHAT facilities will be available

Can the material be used online or does it have to be printed?

HOW the materials will be used

Will the teaching method be didactic, interactive, group work, project assignments?

Progress since last meeting

D2.8 3rd Newsletter issues for teachers (PAS)

February 2020

INTERACT **INTERACT NEWSLETTER**
for teachers and educators
Newsletter #3, February 2020

Dear Teachers and Educators,

INTERACT is in entered its mature phase and is slowly heading toward its end in September 2020, but we have still much more to offer, including newly developed educational resources for various age groups with unique narrated animations exploring polar phenomena. Thanks to your support and valuable feedback we are able to compile and disseminate recommendations for authors of educational materials. With thorough input from SCIENTIK ambassadors we were able to collect the analysis of possibilities of including polar topics into curricula in different European educational systems. Last but not least, we have great news: INTERACT project will be continued with the support of European Commission within Horizon2020 for the next 4 years! This means new educational activities for you and your students!

New educational resources for various age groups and narrated animations

Analysis of opportunities to incorporate polar topics into teaching practice in various levels

Recommendations for authors of educational materials – coming soon

INTERACT in – grant agreement signed, new activities ahead!

Learn how polar ideas can be incorporated into curricula

The aim of our study conducted within INTERACT project was to identify opportunities to use educational materials about the Arctic as a part of school practice, both recently created by the INTERACT consortium (EDUCATIONAL TOOL-KITS: PERMAFROST, GLACIERS), as well as further sets of educational materials. For this CAWI survey, a special group of teachers was addressed: SCIENTIK ambassadors. This was possible thanks to networking resulting in strong links established with SCIENTIK project – an initiative that promotes and supports a Europe-wide collaboration among STEM (science, technology, engineering and maths) teachers, education researchers, policymakers and other STEM educator professionals. We encourage you to read the findings on our website: <https://www.interact.org/interact-newsletter/>. Educational systems and curricula from 5 European countries were analysed (Germany, Spain, Croatia, Sweden, United Kingdom); they represent different parts of Europe, languages and educational systems/cultures/traditions. The variety of school subjects is immense, and does not cover only STEM subjects, but also Human Sciences, Arts, Social Studies etc. Polar topics have cross-curricular potential, which makes them extra attractive for teachers and students, but also shows that different aspects should be covered in educational materials.

A big thank you to everyone who participated in the survey!

Did you know that ...
INTERACT project has been accepted as a part of SCIENTIK project library? This means that our resources will be accessible for more teachers using the widely recognized STEM community. It means that INTERACT became a part of cooperation network between educators, researchers and general public. Thanks to the support of SCIENTIK ambassadors we were able to study different educational systems in various European countries in purpose of opportunities to introduce polar issues into curricula!

Progress since last meeting

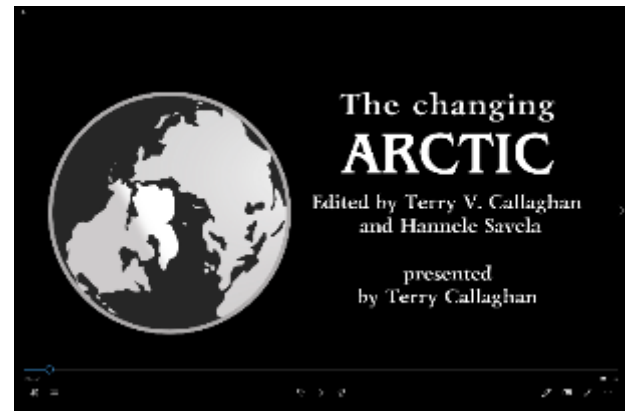
M2.2 - Up-dating and expansion of the online Coursera video course “The Changing Arctic”

This has involved 3 basic steps

- 1) Reviewing the course contents and examination questions
- 2) Linking to new educational resources
- 3) Suggesting extensions.

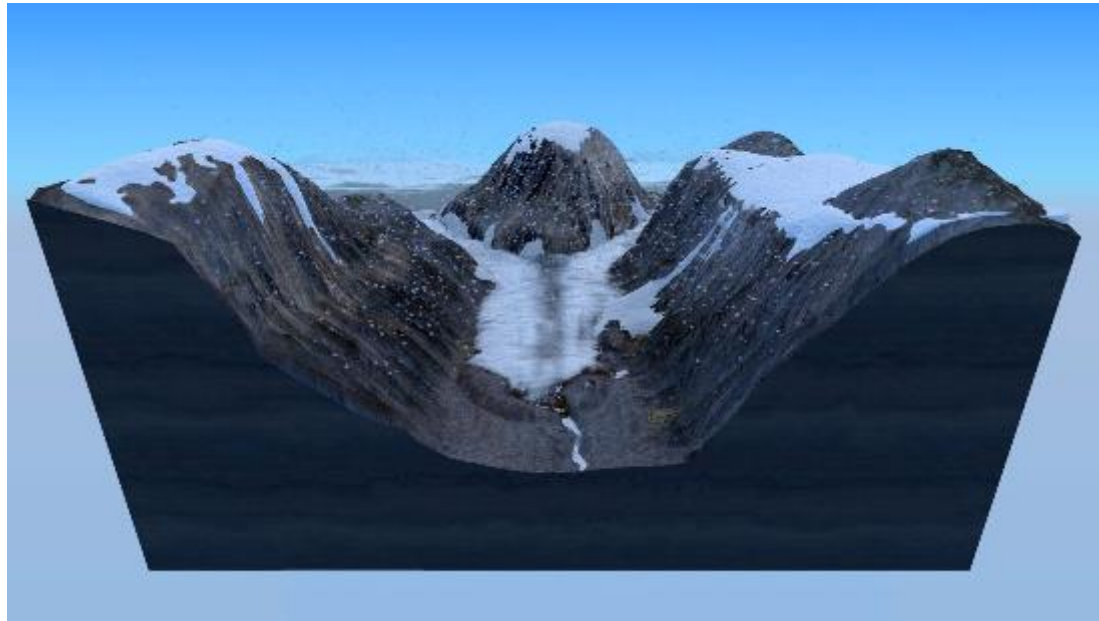
Total learners: 6011

Awards: 457



Highlight

INTERACT Educational Resources are a success: since May last year, there were 15,162 views of the “Glaciation and hanging valleys formation” animation



Any remaining tasks

D2.1 Report summarising feedback from target end users concerning ways to extend the educational value of INTERACT's Arctic gallery and glossary (PAS)

Photos from New Science Stories book will be added to the Gallery.

Deadline: 30 September 2020



Any remaining tasks

D2.2 Report of INTERACT Science Stories II (2016-2019)

INTERACT Stories of Arctic Science II in press: printed and digital (40+ stories in press)

Content

	REVIEWED	10
	Telling climate and land change stories Introduction 1.1.1. Climate change 1.1.2. Land change 1.1.3. Climate and land change 1.1.4. Climate and land change 1.1.5. Climate and land change	11 12 12 14 14 14
	Different ways of knowing 1.1.1. Different ways of knowing 1.1.2. Different ways of knowing 1.1.3. Different ways of knowing 1.1.4. Different ways of knowing 1.1.5. Different ways of knowing	16 17 17 17 17
	Human impacts on the Arctic environment 1.1.1. Human impacts on the Arctic environment 1.1.2. Human impacts on the Arctic environment 1.1.3. Human impacts on the Arctic environment 1.1.4. Human impacts on the Arctic environment 1.1.5. Human impacts on the Arctic environment	21 21 21 21 21
	Human impacts on the Arctic environment 1.1.1. Human impacts on the Arctic environment 1.1.2. Human impacts on the Arctic environment 1.1.3. Human impacts on the Arctic environment 1.1.4. Human impacts on the Arctic environment 1.1.5. Human impacts on the Arctic environment	21 21 21 21 21

	4.1.1. Climate change 4.1.2. Land change 4.1.3. Climate and land change 4.1.4. Climate and land change 4.1.5. Climate and land change	20 20 20 20 20
	5.1.1. Climate change 5.1.2. Land change 5.1.3. Climate and land change 5.1.4. Climate and land change 5.1.5. Climate and land change	20 20 20 20 20
	6.1.1. Climate change 6.1.2. Land change 6.1.3. Climate and land change 6.1.4. Climate and land change 6.1.5. Climate and land change	20 20 20 20 20
	7.1.1. Climate change 7.1.2. Land change 7.1.3. Climate and land change 7.1.4. Climate and land change 7.1.5. Climate and land change	20 20 20 20 20
	Appendix	114

Seven sections + Introduction

1. Different ways of knowing

From Evenki Traditional Knowledge to high tech research



Lavrillier and Gabychev, in press.

2. Human impacts on Arctic environments

Including micro-plastics and light pollution

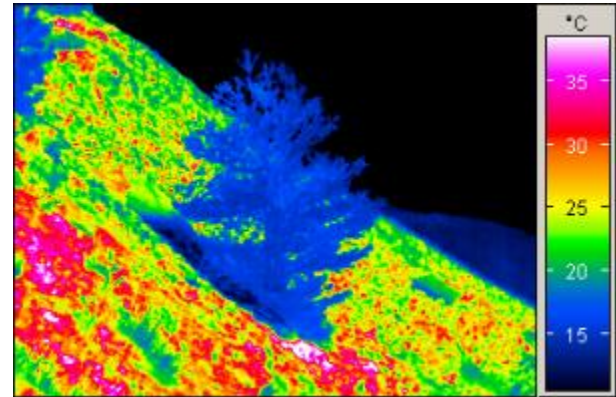


Waller, Griffiths and Roberts, in press.

INTERACT Stories of Arctic Science II: in press (continued)

3. Ecosystem services

Including fragile permafrost ecosystems in Siberian lowland tundra and treeline movement



Körner, in press.

4. Minimising surprises for society

Including unusual weather events in the Siberian tundra and the exploding Siberian tundra



Leibman, Kizyakov, Khomutov, Dvornikov, and Melnikov, in press.

INTERACT Stories of Arctic Science II: (continued)

5. Impacts on local societies

Including forest fires in Siberia
and coastal erosion in the
Canadian Arctic



Irrgang and Lantuit, in press

6. Impacts on global societies

Including “When the ice goes
black” and “Arctic permafrost
protects global biodiversity”



Instones, in press

INTERACT Stories of Arctic Science II: (continued)

7. Working together - INTERACT

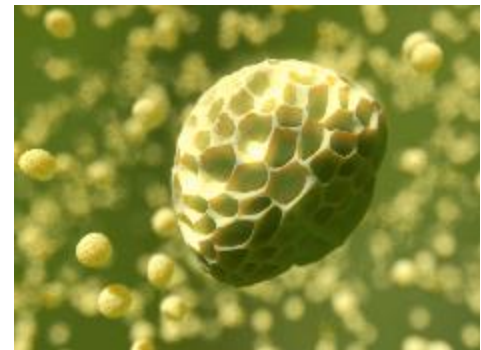
Including “Peace, politics and science in the Arctic” and “INTERACT in the corona virus world and beyond”

The Digital Version

will include extra material, animations, videos, educational resources, blogs etc.



Breum, in press



TSU animated models to show UV-B proxies