

ARKTIS IM WANDEL

Changing Arctic Ocean

**EXAMPLES OF
SCIENCE
COMMUNICATION**

Implications for marine biology and biogeochemistry

Photo by Jen Freer

SPONSORED BY THE



Federal Ministry
of Education
and Research



Natural
Environment
Research Council



Changing
Arctic
Ocean



THE UNIVERSITY
of EDINBURGH

Dr Kirsty Crocket
Science Coordinator
k.crocket@ed.ac.uk

£20 million research

5-year programme
2017-2022

SPONSORED BY THE



Federal Ministry
of Education
and Research



Natural
Environment
Research Council

16 projects

>200 scientists

32 research institutions

Dual national funding
UK and Germany

Framework for Outreach Actions

Target Audience

- Who are they?

Information

- What do the target audience want to know?
- How do we know what the target audience want to know?
- What do we want to communicate?

Delivery

- How are we going to do this?

Aim/Impact

- What change do we want to bring about? (Aim)
- How can we gauge the effectiveness of the material **and** the delivery on the audience?
- Have the audience engaged with the information?
- Have we had the desired impact?

”Changing Arctic Ocean” collection



- Written by scientist & reviewed by kids
- 19 articles based on recent publications
- Freely available e-book
- Translation into other languages
- Bonus: free to publish in FYM!

Children

- Two age groups (8-11 & 12-15)
- Science in an accessible format
- Directly feeds the interest in climate change topics (School Strike for Climate)
- Reliable information straight from the scientists
- **Availability on the FYM website (passive)**
- Distribution through UK STEM Network (active)

Aim:

- Greater understanding of Arctic science & Arctic issues
- Critical reading (by the young reviewers)

”Changing Arctic Ocean” collection



- Written by scientist & reviewed by kids
- 19 articles based on recent publications
- Freely available e-book
- Translation into other languages
- Bonus: free to publish in FYM!

Adapt for schools

What more can we do with this resource?

The target audience of schools is reached through teachers!

Teachers appreciate:

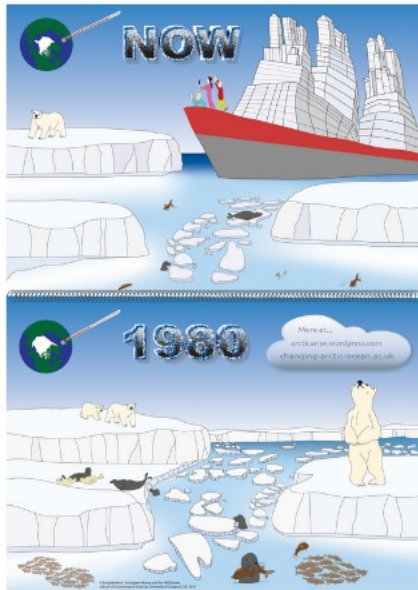
- reliable scientific information that is not always easy to access
- lesson plans and class-based activities that are ready-to-use and relevant to specific age groups and/or curricula

To reach schools:

- Adapt material in FYM articles into lesson plans or class-based activities
- Make those resources available through (i) national school networks, (ii) platforms used by teachers, (iii) other networks involved with schools (e.g. UK STEM Network)

Other resources for schools/children

Posters & teachers' notes



- Teacher networks
- Local schools
- UK STEM Network

<https://arcticarise.wordpress.com/outreach/>

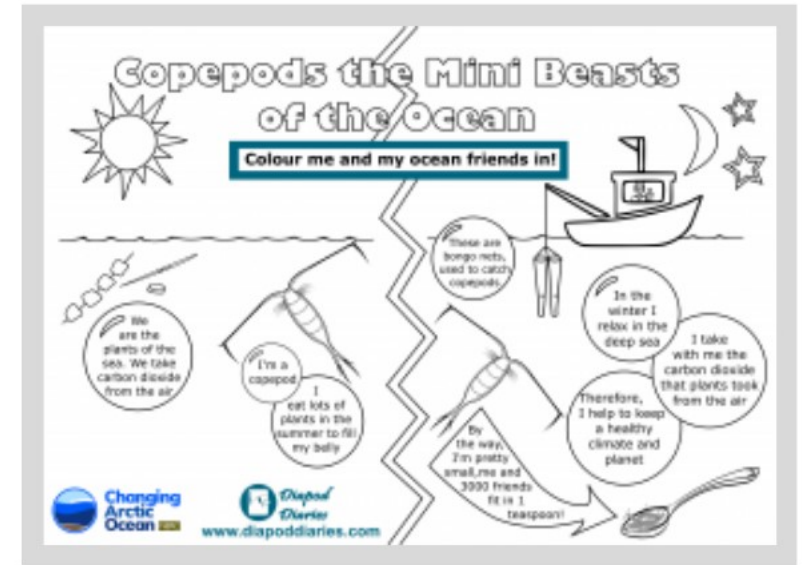
Theatre performance



- Schools
- Theatres
- Festivals

<http://www.mimikatheatre.com/Site/Index.html>

Activity sheets



- Museums
- Schools
- UK STEM Network

http://bit.ly/CAO_SciComm

Pint of Science



- Existing network of promotion
- A very engaged audience
- Example of taking the message to the right location

Festivals, science-based or other



General public

"Science Lates" at museums



- Adult only
- Hands-on
- Alcohol available

Policy stakeholders (short & specific)

WG Reports to Arctic Council



- Participation in AMAP working groups
- Input of science findings to reports (POPs report to be published imminently)

Briefing notes & seminars



- 4-page briefing notes
- Lunchtime seminars by scientists to UK Gov depts
- Information must be adapted to non-peer audience

Publications aimed at policy teams



- Short articles
- Written for policy & public stakeholders (NOT scientists)
- "Valuable resource of unambiguous information"

What we haven't achieved

Harder-to-reach communities

- Ambassadors to communicate and deliver
- Delivery in accessible locations, e.g. in their communities
- Financially accessible/free

Aim:

- Build trust
- Increase engagement
- Increase representation

Overcoming disability barriers

Material available in accessible formats, e.g.

- braille
- audio/visual/sensory experience
- physically accessible