

A Journey to a Cold Seep: A paired teaching video lesson

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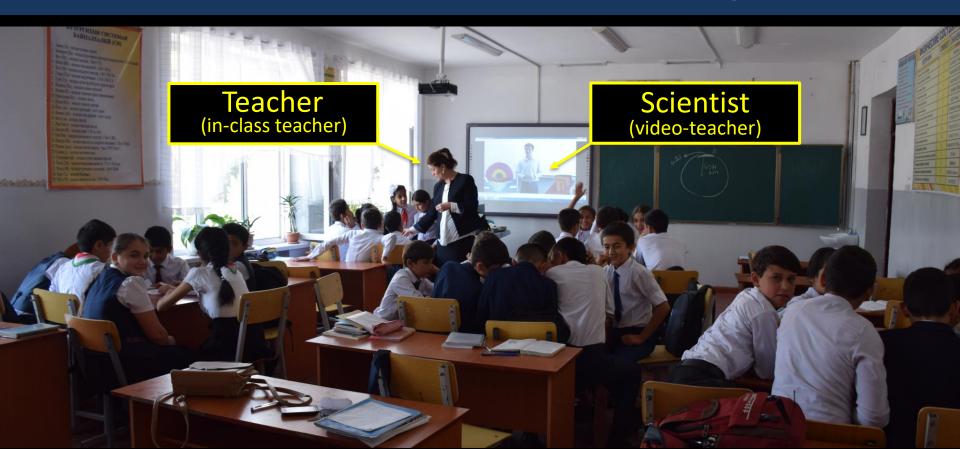




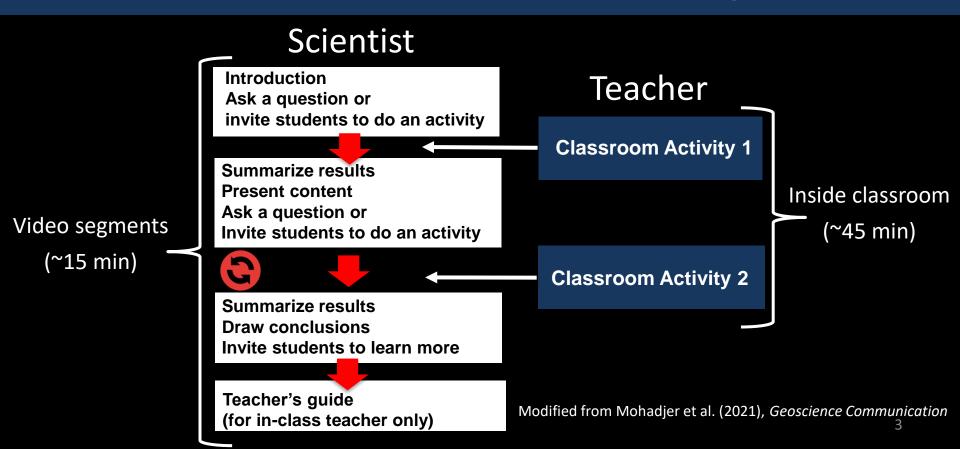




What is Paired Teaching?



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Roadmap

Goal

To promote teaching and learning about the Arctic Ocean in schools by creating virtual lessons instructed by scientists in partnerships with teachers

- 1. Lesson information
- 2. Video protocols
- 3. Lesson structure & content

Lesson Information

Objectives

- 1. To locate the Earth's methane/gas hydrates
- 2. To discover the processes that happen at continental margins
- 3. To learn how scientists study methane

Level
Pre-requisite
Length
Materials

1st year high school General Science course in Norway

Understand maps, molecular structure and greenhouse effect

1 hour (15 min video, 45 min classroom activity)

3 maps, molecular modelling kit, extra imagery from seafloor

Video Protocols

STEPS:

- ☐ Develop lesson concept
- □ Design lesson architecture
- ☐ Write the pseudo script
- Make the video

All steps are taken by both the teacher and the scientist.



Preparing to film during the AKMA2 expedition

Lesson Structure & Content

Scientist

video segments (20 min)

Introducing Activity 1 (5 min)

Introducing Activity 2 (3 min)

Introducing Activity 3
(1 min)

AKMA & Call to Action (10 min)

Teacher's guide

Teacher

In-class activities (30 min)

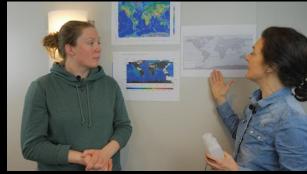
Classroom Activity 1 (Mystery bottle,5 min)

Classroom Activity 2 (Exploring maps, 10 min)

Classroom Activity 3 (Discovering methane, 15 min)



Video snapshot of Activity 1



Video snapshot of Activity 2 & 3

Resources for Educators

VIDEO: https://tinyurl.com/pairedteaching LESSON PLAN: https://tinyurl.com/mps7urt6



EGU23 Live Session:

Thu, 27 Apr, 13:00-14:00 CEST (online)

Zoom link listed under Pop-up Networking Events

Contact: vibeke.aune@gmail.com

