Improve learning with open science: Insights from QGreenland workshops

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https://nsidc.github.io/qgreenland-workshops-poster-site/

WHAT IS QGREENLAND?

QGreenland is a free, open-source data package for the QGIS platform which works both online and offline, making it an accessible tool for use in the field and places with limited internet availability.

QGreenland removes barriers to GIS data exploration with a fully integrated and user-friendly viewing and mapping environment for Greenland.

WORKSHOPS

- **Denmark and Greenland user workshops**
  - Focused on introducing QGreenland, QGIS, and geospatial data & analysis concepts
  - In-person with ~60 participants across 3 workshops
- **Researcher workshop**
  - Focused on open science and geospatial data management and analysis
  - Virtual workshop with 25 participants
- **Educator workshop**
  - Focused on developing interdisciplinary learning resources
  - Virtual workshop with 9 participants

2023 Workshop Overview

3 in-person workshops

2 virtual workshops

8 tutorial videos

90 participants from 12 countries

QGreenland improves access to Greenland geospatial data and increases data skills through our variety of workshops and resources designed to be accessible for beginner to intermediate users

For Educators

For Researchers

For Professionals

> "*The most noteworthy aspect of the workshop revolved around active participation and engaging in practical exercises.*"

> "*I found it a lot easier to ask questions and understand the projects/exercises when I was able to see other people's screens and talk amongst a small group.*"
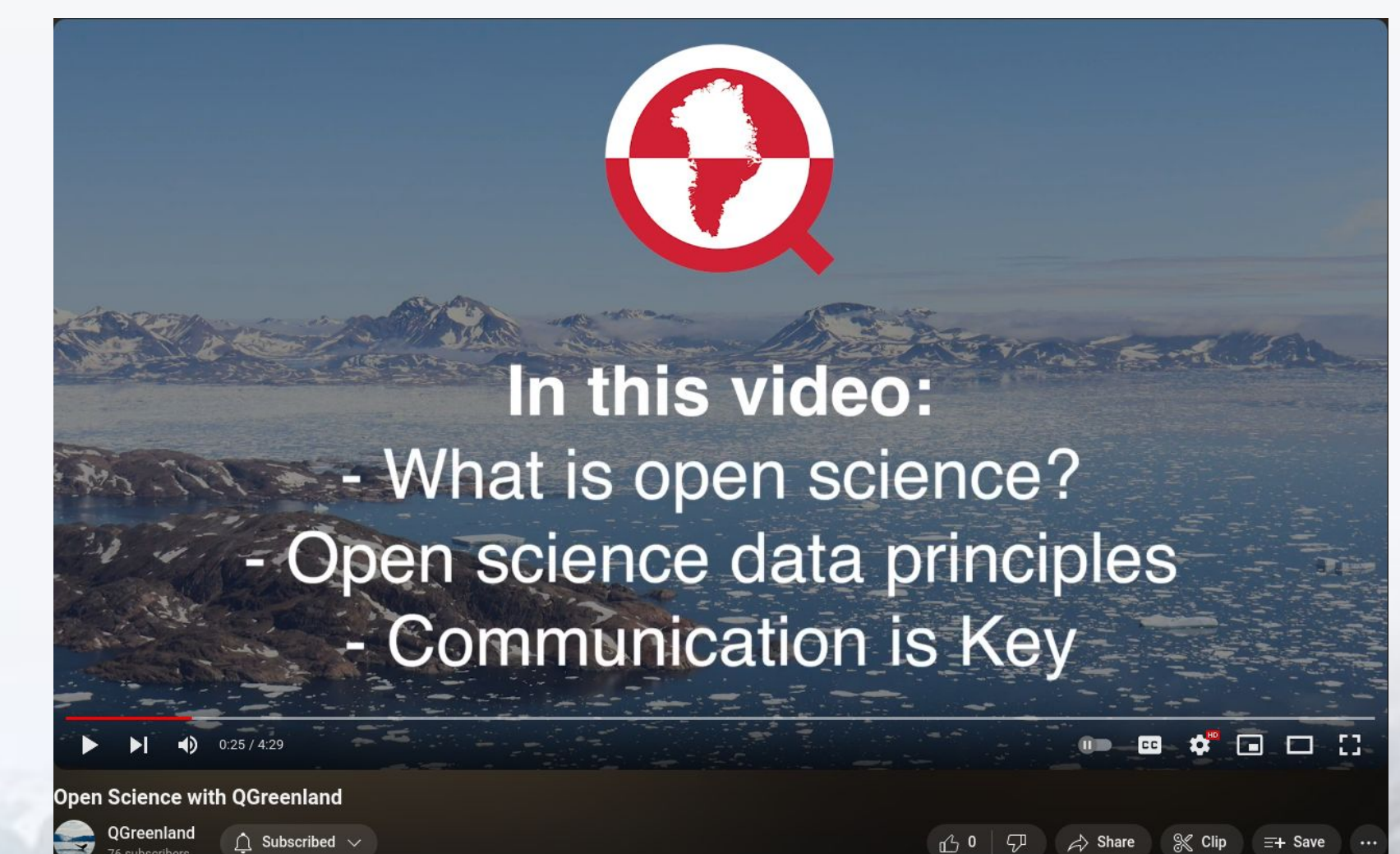
CHALLENGES

- Some participants less prepared than others
- No-shows & impacts to pre-planned breakout groups
- Language barriers
- Broken technology (pre-loaded flash drives failed!)

LESSONS LEARNED

- Minimize participant-specific prerequisites (e.g., software installed on personal computers).
  - Partnered with CryoCloud to provide a QGIS/QGreenland cloud environment.
- Err on the side of providing extra time for exercises.
  - "*I didn't feel like we had enough time (even though we had lots).*"
- Design content for the workshop and beyond - reuse and promote these materials!
  - Newsletter highlights, transform into tutorial videos, repeat workshops.
- Stipends are an effective incentive for participation!
  - $250 for ~3-day virtual workshop.

SUPPORTING LEARNING WITH QGREENLAND

- Beginner-friendly user guide
- Exercises and curricula for educators
- QGreenland YouTube channel - new content based on researcher workshop is under development!

In this video:
- What is open science?
- Open science data principles
- Communication is Key

https://www.youtube.com/@qgreenland

QGREENLAND.ORG