

EXAMPLE OF A LOCAL SITE FOR 10TH GRADE

Learning Objectives – Science, 10th Grade:

- «Provide examples of and discuss current dilemmas related to the exploitation of natural resources and the loss of biodiversity».
- «Use the theory of plate tectonics to explain the development of the Earth over time, and provide examples of observations that support the theory».

Learning Objectives – Social Studies, 10th Grade:

- «Explore how technology has been and continues to be a driving force of change, and discuss the impact technology has had and still has on individuals, society, and nature».

Based on this, a **field trip to Stordø Mines** is relevant – a community built around a pyrite deposit formed by volcanism in the Iapetus Ocean – followed by classroom instruction on the related topics.

PART 1: Excursion to Stordø Mines – 3 hours incl. transp. to/from school (Nysæter Youth School, Langeland YS, Stord YS, Nordbygdo YS)

Goals:

- Give students a sensory and concrete experience of what mining operations looked like and how they functioned.
- Initiate discussions on geology, technology, society, and politics related to the mines.

Program:

1. **Transport** from the school to Litlabø
2. **Mining Operations and Technology**
 - Meet the guide and receive an introduction. Walk through the mining area and into the mine to experience the atmosphere.
 - Gain insight into the processes and working conditions.
3. **Community and History** (through the guide)

- Housing, work life, politics (Labour Party/Communist Party), class differences
 - The war and the raid on the mines
 - Closure and transition to the shipyard
4. **Transport** back to the school.

PART 2: Classroom Activities – Dialogue-Based Teaching (3×45 min.)

- Socratic dialogue or philosophical conversations with open-ended questions and reflection.

Session 1: Geology and Resource Exploitation

Focus: How was the pyrite deposit formed, and what dilemmas are associated with its extraction?

Activities:

- **Short film/animation:** Plate tectonics and seafloor volcanism
- **Discussion questions:**
 - What geological processes led to the presence of pyrite in Litlabø?
 - Why is it important to understand these processes?
 - What consequences does mining have for nature and biodiversity?
- **Task:** Students write a short note discussing the advantages and disadvantages of mining

Session 2: Technology and Society

Focus: How did technology make mining possible, and what societal changes did it bring?

Activities:

- **Class discussion:** From prospecting to industry – what technology was used? How did it change life in Litlabø?
- **Discussion questions:**
 - What technology made large-scale pyrite extraction possible?
 - Who profited from the mining? Who did the hard labor?
 - Can we compare this to how technology impacts society today?

- **Task:** Students create a **Venn diagram**: Similarities and differences between Litlabø and today's technological society
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Session 3: Workers, Politics, and the Future

Focus: How did mining affect the people living there – and how does this connect to politics and societal development?

Activities:

- **Group roleplay:**
 - Students take on roles as miner, owner, local politician, environmentalist, technologist
 - Debate: Should Litlabø open a new mine today?
- **Discussion questions:**
 - What was daily life like for people working in the mine?
 - What did most people think about the owners and conditions?
 - What lessons can we take with us today when discussing new resource exploitation?

Assessment:

Suggested interdisciplinary assessment at the end of Session 3 **or in a possible 4th session:**

- Written **reflection log** after the excursion and classroom work
 - Oral **presentation** on a self-chosen topic from the program (geology, technology, society)
 - Assessment of **participation** in dialogue and roleplay
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Note! Supporting materials:

- Then GEOSITE tools. www.geosite.no
- Photos and film from Litlabø
- Primary sources (film with worker interviews, newspaper clippings)

Venn-diagram:

