

What kind of upskilling is needed for the Blue Bioeconomy? – How to attract people to the Blue Economy?

Speaker: Christian Riisager-Simonsen, DTU Aqua

THEME: Citizen Engagement, Business

Considerations for implementing new teaching materials in upper secondary

- One way to increase awareness about marine topics (OL) including blue career paths is through the formal school systems
- Barriers:
 - ***Availability*** of ***relevant*** teaching materials to day
 - Availability of up to date materials demand ***sustained efforts***
 - ***Ability of teachers*** to teach new topics through new materials
 - Ability of ***scientists*** and research institutions to allocate time to ***continuously*** support development of materials and educate teachers

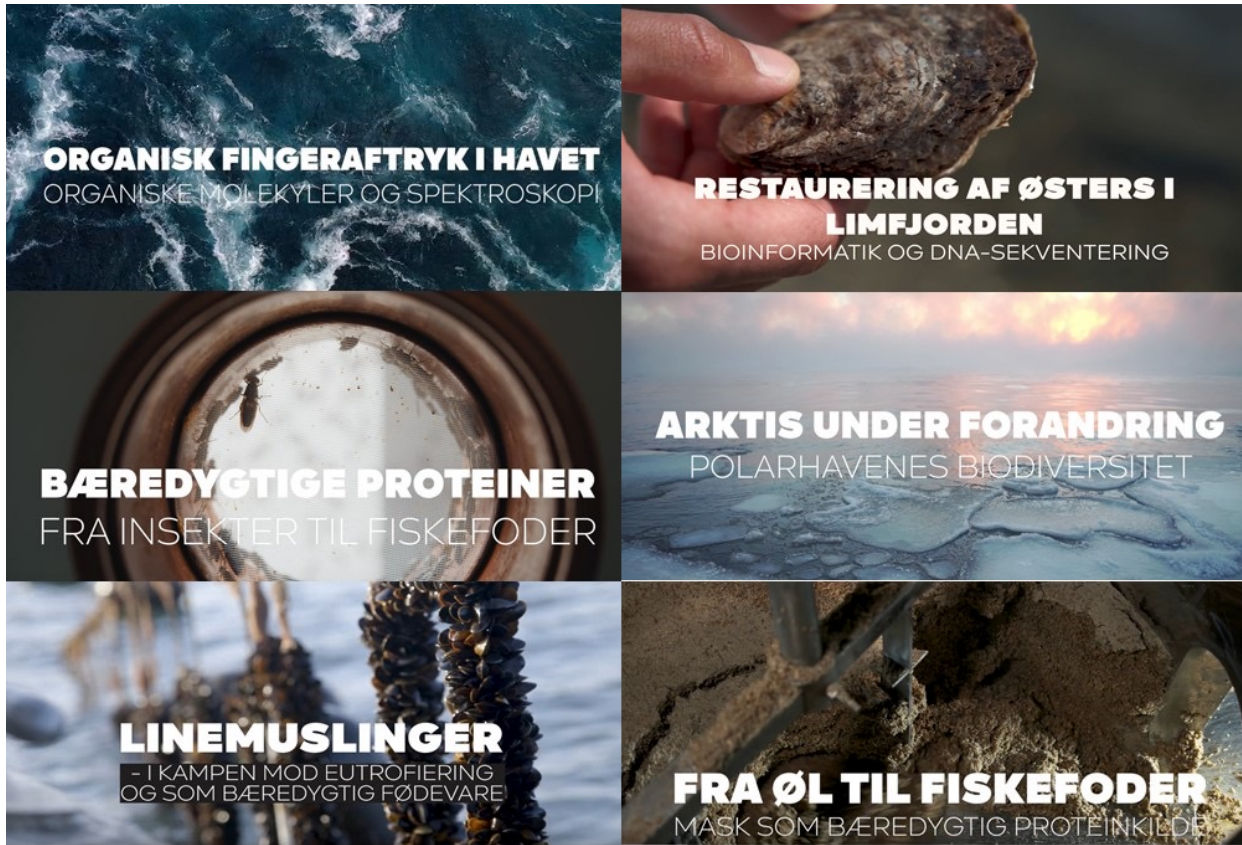
The case: STEM for the SDG's

- Ensuring teaching materials are demand driven
 - what is formally required = mapping of curricula relevant to marine topics
 - what is presently in demand content and formats = demand analyses (both teachers and students)
- Ensuring competence from research institutions
 - which demands can the institution meet = internal evaluation of portfolio
 - who are the right researchers to help develop materials = PhDs/post docs (career angle)
- Ensuring materials work in actual class rooms
 - who has the competence to lead development = upper secondary teachers
- Ensuring up-take among teachers
 - where do teachers go to educate them self = ministerial meetings, national conferences
 - how can we keep reminding them = newsletters, SOME etc.

Sustainability of the process and impact

- How does the process become sustainable for a marine institute?
 - Find the right funding stream = E.g. Horizon calls
- Understand what works and what doesn't
 - How to evaluate the quality of products = External evaluation
 - How to evaluate reach = Participants in the courses, downloads etc.

Impact of STEM for the SDGs



- 250 upper secondary teachers took part in the courses
- Estimate that 85-215 teachers have used materials by 2025
- Estimate that 7.000-17.000 students will have encountered materials in their education in DK by 2025.