

A light blue silhouette of a world map serves as the background for the central text.

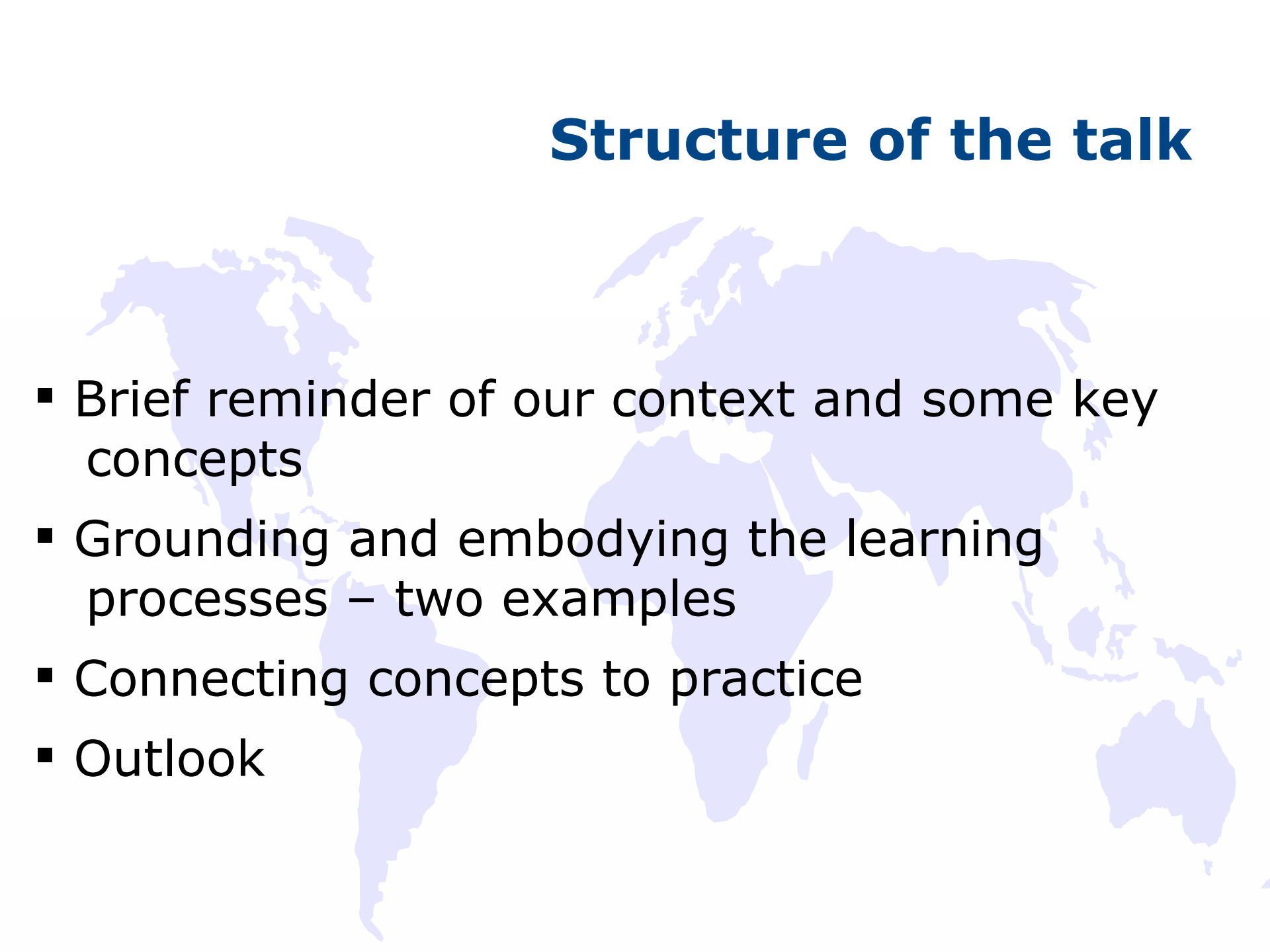
# **Sustainability Education Meets Development in West Africa**

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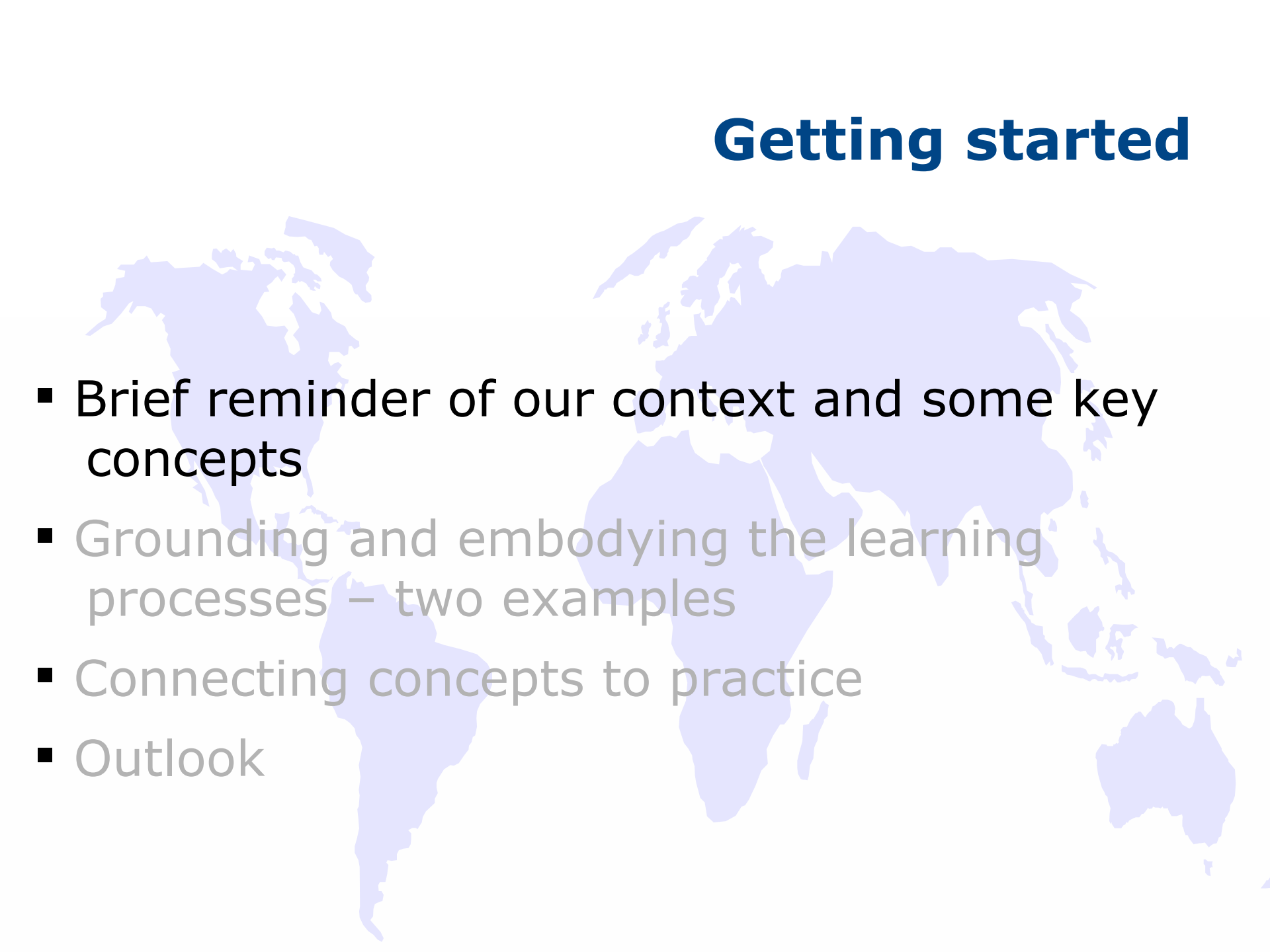
**Mundus maris  
Sciences and Arts for Sustainability asbl**

**EADI General Conference, Bonn, Germany, 23-26/06/2014**

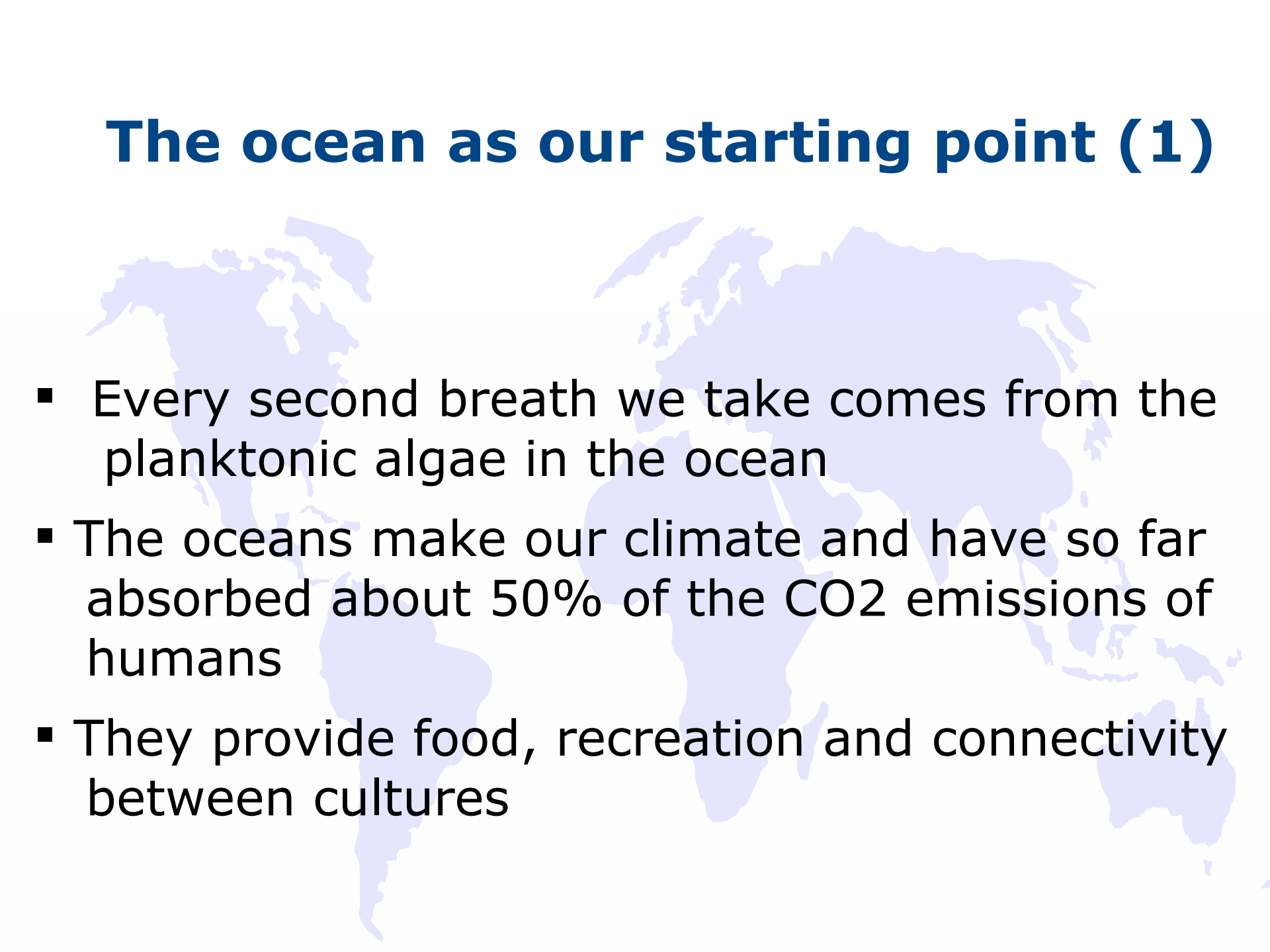
# Structure of the talk

- 
- Brief reminder of our context and some key concepts
  - Grounding and embodying the learning processes – two examples
  - Connecting concepts to practice
  - Outlook

# Getting started

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# The ocean as our starting point (1)

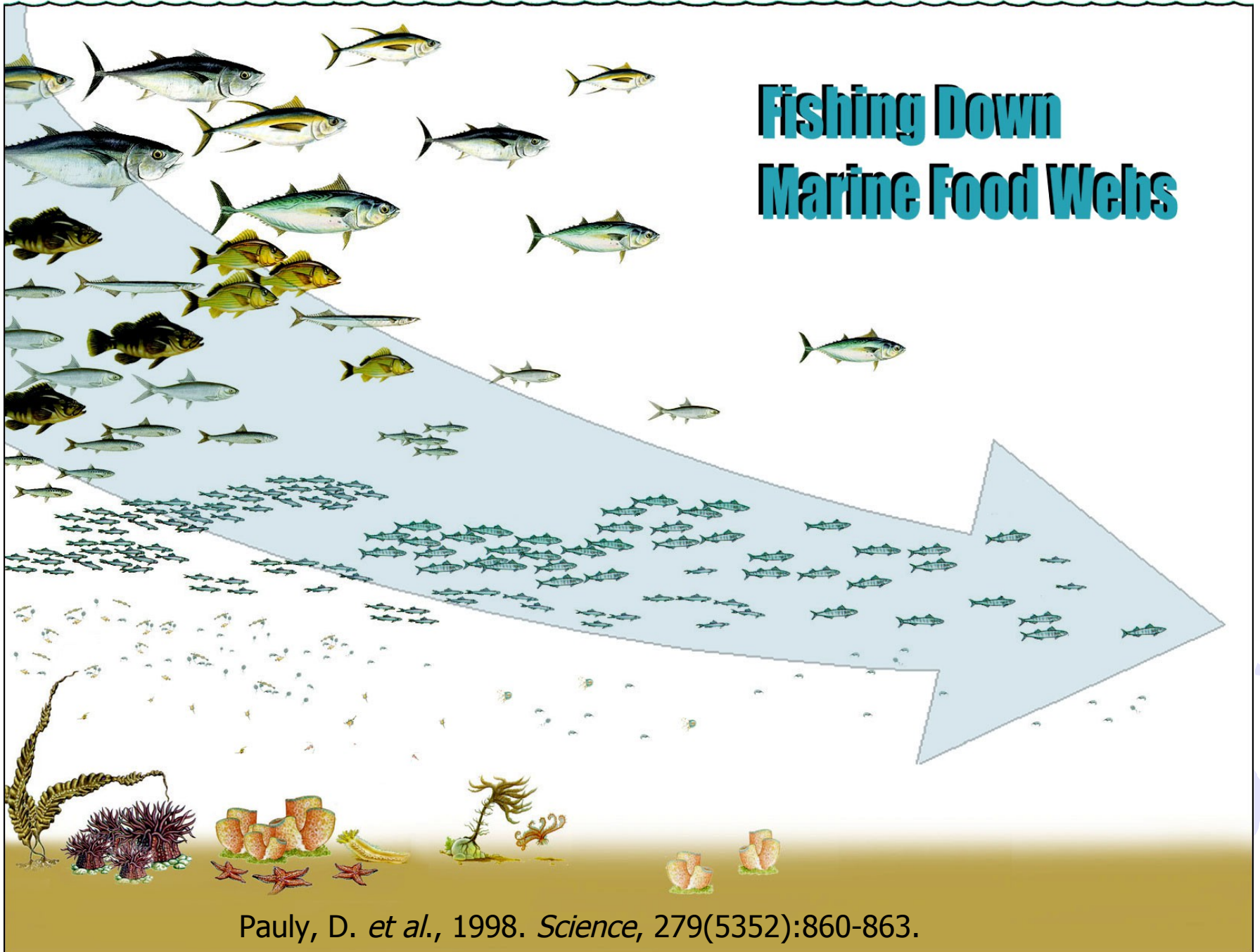
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- Every second breath we take comes from the planktonic algae in the ocean
  - The oceans make our climate and have so far absorbed about 50% of the CO<sub>2</sub> emissions of humans
  - They provide food, recreation and connectivity between cultures

# The ocean as our starting point (2)

The three major threats to the oceans are even more serious than we thought

- Overfishing
- Climate change with warming, sealevel rise and acidification threatening corals and other organisms with calcarous skeletons
- Pollution (overfertilisation from agricultural runoff → dead zones; ubiquitous plastic litter)

# Fishing Down Marine Food Webs



Pauly, D. *et al.*, 1998. *Science*, 279(5352):860-863.

# Concepts (1)

- **Sustainability** requires reconnecting to the Earth
  - The resources on Earth are finite, even though we are very ingenious in finding new technical fixes - right now by borrowing from the future
  - Our Earth is quite unique within the accessible parts of the universe, we better make it work
  - We produce enough food to feed everybody, but 1 billion is obese and 1 billion is hungry

## Concepts (2)

- **Education** – key education indicators, such as teacher-pupil ratios and age structure of teachers are weaker in Africa than in other continents.
- Education starts at home, with teachers often influential multipliers, but also other sources.
- **Education for sustainable development (ESD)** is not a generalised feature. Change - traditional restraint down, new models up.
- But, low and mid-level income countries waste fewer resources than industrialised ones.



## Concepts (3)

- **Community development** emphasises civic and professional action to build more resilient communities.
- Investment in public goods and organisational capabilities as way to improve conditions.

Wilkinson and Pickett (2009, 2010) "The Spirit Level. Why Equality is Better for Everyone".

- **Self-help forces in society** – grounding development in local knowledge, but be open through education and drafting in external knowledge to innovate and adapt.

## Concepts (4)

- **Leadership in transformational change:** honing leadership qualities in every part and level of the education system as a precondition of internalising change management and robust implementation.
- Adapt principles to context, but emphasise recognition at every level and collective learning as well as mutual help.
- This is particularly important under conditions of generational change in African teaching staff and mobility.

# Blending disembodied general knowledge with ground realities

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## An example: making development stick

Listening to the demands of the women, improved fante smokers became adopted, while other (more expensive – and perhaps 'technically better') models initially pushed by a development project were not accepted. The locally chosen model “stuck”!



# An example: new practices in schools



Fish rulers as teaching aids for more active learning in (almost) real life situations, here a market

Demonstration to the fish mongers is not enough but a useful step to enable critical reflection.



## Embodying change

We observe that


**(a)** people will not easily act on aggregate, abstract problem statements, though these may cast light on the “bigger picture”

**(b)** we need new narratives that connect the local levels of experiences and possibilities with that bigger picture.

**(c)** we have forgotten past states of social conditions, of the environment – and imagining the future is difficult. Fixing objectives suffers.

**(d)** ability to act out of experiencing difference, prototyping

# A glimpse on learning by doing

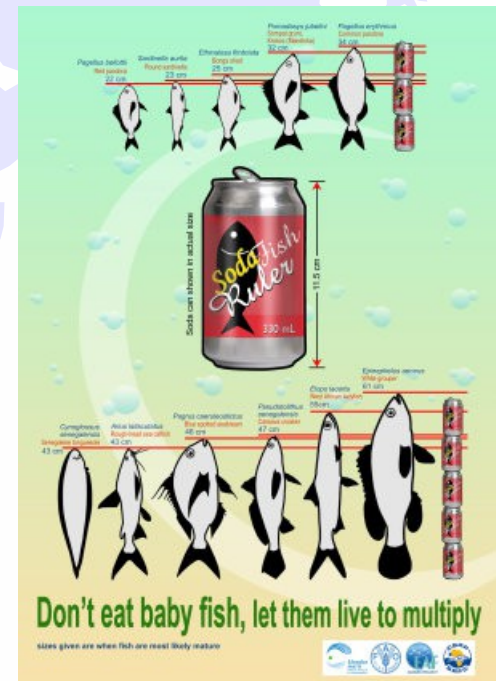
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# Pilot activities in Senegalese and Gambian schools on new teaching (1)

Starting with a needs assessment, based on semi-structured questionnaires: 81 informants (school directors, teachers, school inspectors, parents, fisherfolk, media people etc.)

- Need to build bridges to traditional culture and otherwise devise approaches that are doable under local conditions;



## **Pilot activities in Senegalese and Gambian schools on new teaching (2)**

Development and implementation of a strategy to introduce new content and teaching approaches built on what was there or within local reach and listen to and support the teachers in testing teaching aids.

Periodic group assessments were essential to support testing and peer learning.

All teaching aids evolved.



# Pilot activities in Senegalese and Gambian schools on new teaching (3)

Market of ideas – realise dreams of positive change? Follow-up workshop in 2013 has led to implementation of 2 out of 5 dreams.



# What have we learned on that journey?

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# Where do we go from here? (1)

1. While we can confirm many research findings about the obstacles to development and improving education within weak institutional frameworks, we also observe that there are opportunities for positive change. We can not wait until frame conditions are perfect.

2. We see major opportunities by refocusing on people and groups and creating conditions where they can reconnect to one another and to nature. That generates fresh energy within themselves to imagine and try out alternatives to current unsustainable conditions.

## Where do we go from here? (2)

3. We would like to respond to the demand by the school inspection of Grand Dakar to extend the pilots in a more systematic manner to all schools in one town (Hann) as a test bed for a lengthy regional process among 7 countries in NW Africa to introduce environmental and sustainability education into the ordinary curriculum.

4. Challenge: Develop the plan together with the inspection services and school principals, set up accompanying research and raise the necessary funding for capacity building and testing for at least two years (all WB funding goes to the ministry, no resources are allocated to the ground level).

**For more ...**

**<http://www.mundusmaris.org>**

**Paper submitted to EADI**

**We encourage and welcome cooperation**  
for the exploration of new avenues of critically  
engaged sustainability research in combination  
with experimental work and practice, creating  
opportunities for young people in the process

**I'm still a baby,  
let me live and grow**



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# Thanks!

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