

Co-creation of learning resources that cross disciplinary boundaries within an international learning community

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- Pilot study – over 10 months
- Mixed methods – surveys, observation, interviews
- Develop a cross disciplinary, cross cultural **learning community** of 10-20 early career teachers (ECT's)
 - CCCU
 - City Schools, Karachi, Pakistan

Facilitate 3 workshops which explore **sustainability**

- **Epistemic Insight** (EI) tools and strategies
- **Co-create resources** for teaching for about science and religion relative to sustainability
- **Test** resources in ECTs' schools
- **Evaluate and refine** resources within learning community
- **Dissemination** – e.g. Zenodo Open science platform

<https://zenodo.org/communities/epistemic-insight/>



- To **evaluate the effectiveness** of the learning community for developing ECTs' **understanding** of, and **confidence** in exploring, **science and religion** in relation to issues of **sustainability**
- To explore ECTs' perceptions of the **value** of the **learning community**
- To explore ECTs' perceptions of the importance of recognizing **diversity** in religion and worldviews around these topics.



- Sustainability: is often, a question for science and technology
- Though, questions of sustainability naturally link to theology
- Particularly stewardship or guardianship and 'looking after the earth'
 - who is responsible?
 - who are those responsible, responsible to?
 - why are they/we responsible?



Frozen Planet (Image: BBC Studios)

LASAR's project sits in the science-religion discourse

Synergy and interaction between stewardship and STEM

TIES the sustainability conversation together

Enables a multidisciplinary response: e.g., population, economics, technology, environment

"I used to think the top global environmental problems were biodiversity loss, ecosystem collapse and climate change. I thought with 30 years of good science we could address those problems, but I was wrong.

The top environmental problems are selfishness, greed and apathy - and to deal with these we need a spiritual and cultural transformation and we scientists don't know how to do that."

Gus Speth

An interesting perspective...



Sustainability – simple questions to ask:

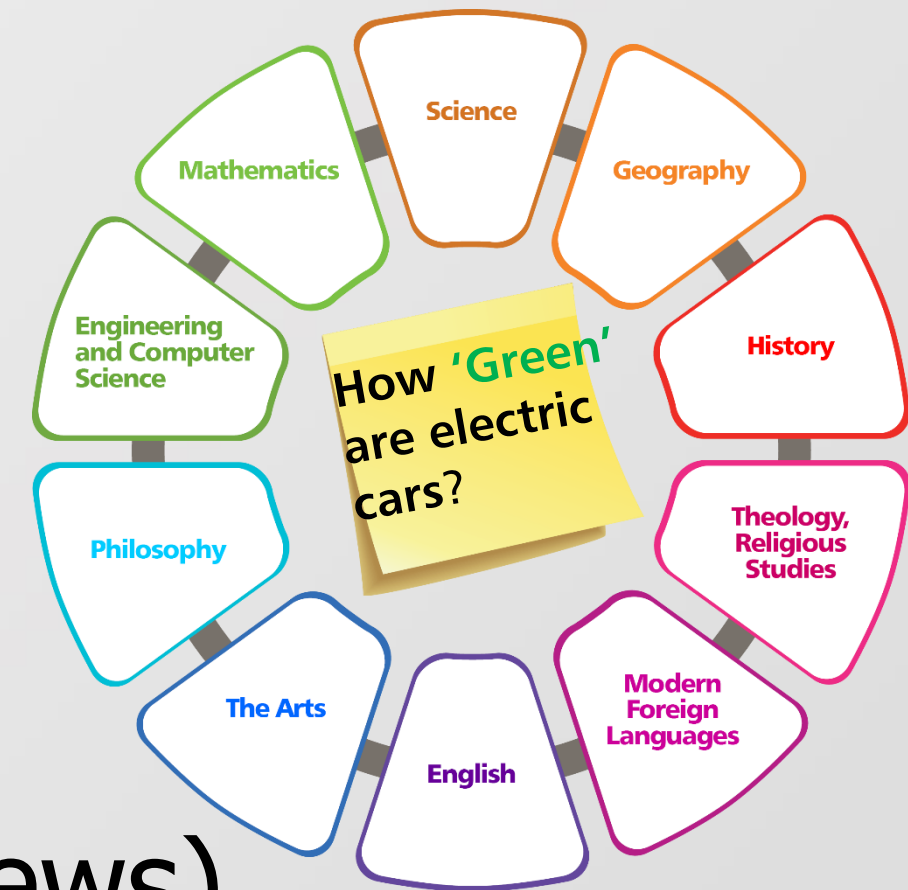
- Science – How can we do it?
- Religion – Why should we be doing it?
- Science and religion – challenges for teachers
 - Can feel like a contested space/often perceived as incompatible

Learning community offers a knowledge exchange

- Supports learning about aspects of stewardship and sustainability - considering cultural contexts and international experiences
 - e.g. different cultural, religious, geographical views
- Safe space to test out ideas, thinking and pedagogy
- Broadening perspectives



- **Introductory session:** Explained and applied Epistemic Insight (EI), inc tools, to demonstrated how EI enhances interdisciplinary teaching and learning
- **Session 1:** Explored **sustainability** through the lenses of:
 - **Science**
 - **Religious worldviews**
- **Session 2:** Collaborated to **plan a sustainability lesson** – incorporating science and stewardship (religious worldviews)
- **Feedback:** *What surprised you the most about the session?*
 - "Importance of teaching sustainability in the classroom."
 - "Link of science with theology."



Stewardship

A responsible person, someone who looks after things for others, plans and manages as well.

Students were not much aware of the term stewardship....responsibility for something and take ownership to fulfil the responsibility and to manage the resources well to achieve the desired results.

That stewardship is understood as taking care of or looking after the environment and living things around us

They are eco aware and would say it is about recycling, not wasting resources. They worry about climate change. They may not yet understand their need to make personal sacrifices.

Sustainability

To be sustainable is to meet the demands of the present without sacrificing the requirements of the future, and to do so in a way that maintains a healthy equilibrium among economic development, environmental protection, and social progress.

It is the process of meeting ends meet and developing a stable lifestyle to avoid a crisis

What do you hope to gain from the learning community?

A new insight into bridging science, religion, and humanity and how to bring them all into the classroom.

New ideas and methodologies and how can I execute and implement them in my classroom.



Be a part of a learning community to be more aware and contribute to improving the problems of my country and the world at large.

It would help me to strengthen my professional abilities further.

What are teachers gaining from the learning community?

The debate around the relationship between S & R was striking and triggered a trail of questions in my mind...



Science and religion have a lot of overlap and are not contradictory – not always easy to get across

A good learning opportunity...collaboration and interaction is always healthy

Speth's quote was convincing...it made me agree that all scientific developments need a sense of ownership and guardianship...

Really thought-provoking and stimulating – identifying links that are not necessarily obvious

- Dominant view that STEM can resolve sustainability issues
- Preference for multidisciplinary approach over explicitly religious response
- Diversity of Religion/belief/worldviews in different societies/cultures
- **OECD 'Learning Compass 2030'** reflect 21st century challenges in cross-curricular themes, promotes holistic learning beyond 'traditional' approaches:
 - **environmental education and sustainability**
 - **local and global citizenship, peace,**
 - **cultural identity and multiculturalism**
- Epistemic Insight provides strategies to enable holistic learning within and across disciplines.

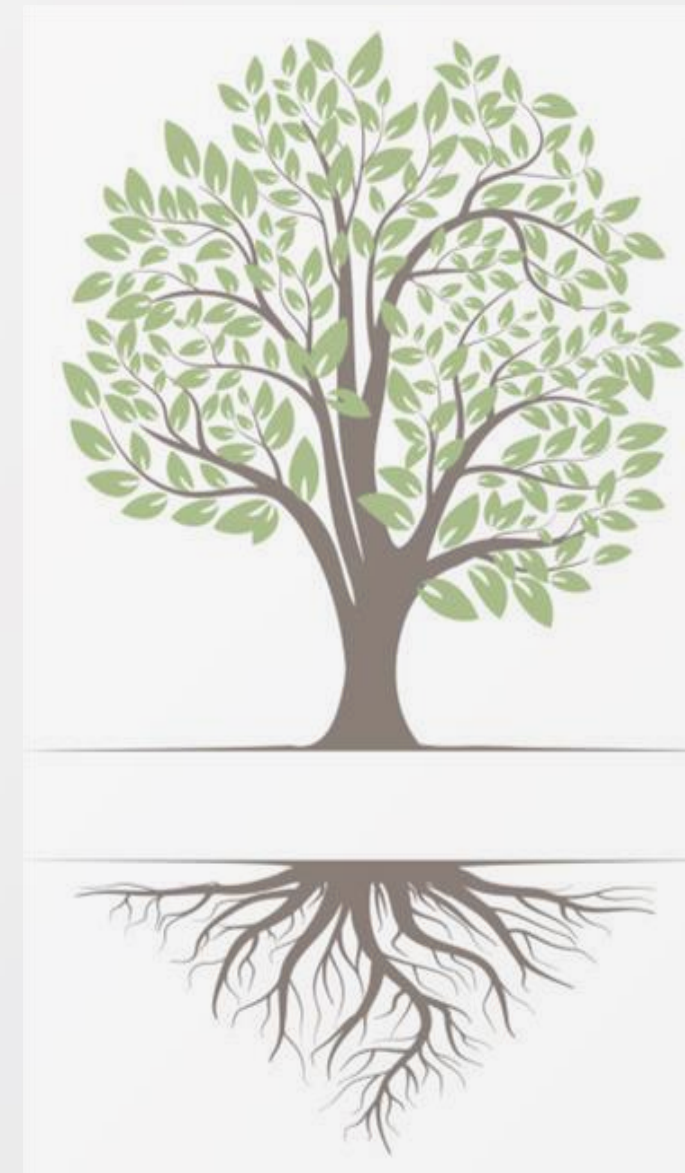


OECD - Organisation for Economic Co-operation and Development



What we thought were the Challenges...

- Different curriculum models
 - Systematic study of Islam (Karachi)
 - RE and worldviews (UK)
- Awareness of sustainability and stewardship
- Understanding sustainability from differing perspectives
- A clear understanding of what stewardship means
- How stewardship and STEM interacts with sustainability
- Space to address the relationship in the classroom
- Confidence to address the relationship in the classroom



What have been the Challenges...

Participants who have attended sessions or interacted through the learning community platform have been very engaged, however:

- Recruitment to the project
- Possible reasons for lack of engagement with project:
 - Timing of sessions within the school calendar
 - Staff workloads and capacity
 - International time difference of session times GMT(BST) to PKT



**Any questions
for us?**



**A few questions for you,
and chance to register
interest.**

