

**Science, religion and sustainability in schools:
outlining a teacher learning community approach.**

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Project team



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- Pilot study – early stages
- 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

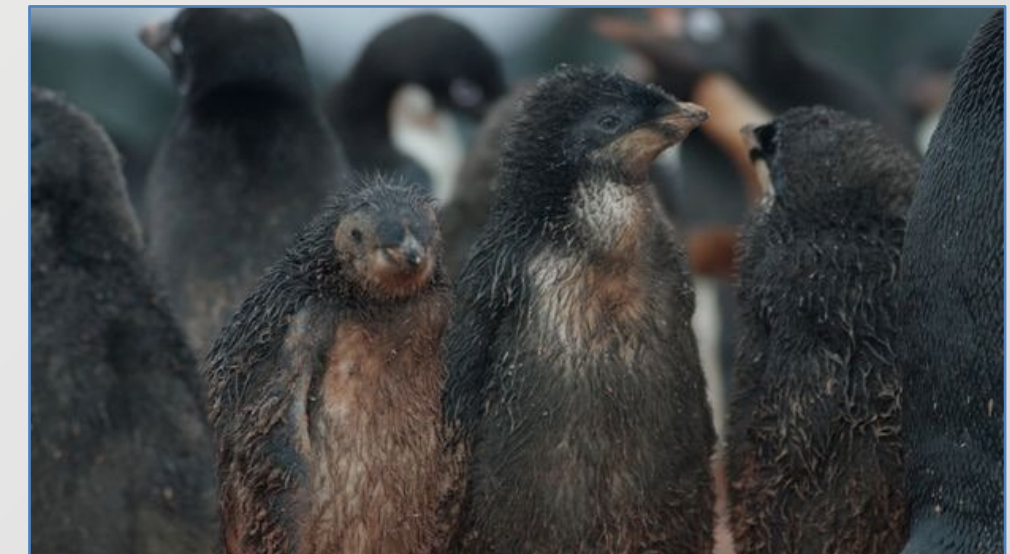
<https://zenodo.org/communities/epistemic-insight/>



- 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, pedagogy
- Broadening perspectives



Introductory session with City Schools, Karachi

- Explained and applied Epistemic Insight (EI), inc tools, to demonstrated how EI enhances interdisciplinary teaching and learning
- Interactive activities:
 - *What is a footprint?*
 - *How is tea made?*
 - *Sustainability and the sea - What is causing decline in marine population? How can science inform our thinking? Do we need other perspectives?*
- Feedback: *What surprised you the most about the session?*
 - *"Importance of teaching sustainability in the classroom."*
 - *"Link of science with theology."*



If you are interested in joining the learning community, what do you hope to gain from the experience?

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.

- 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



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



Sustainability – science, religion and wider humanities

- Expert in exploring through a teacher/teacher education lens
- Invite
 - expertise in sustainability issues
 - collaboration or suggestions
- Recruitment – CCCU underway

