Energy Literacy: Community engagement in renewable energy solutions

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Outline

Education as professional development?

Education for their students and employees?

A MOOC on Renewable Energy? (massive open online collaboration)
MOOCs in the context of the RELIEF Centre
Relief Centre – Future Education Research

Dr Eileen Kennedy

The RELIEF Centre is a transdisciplinary research collaboration that focuses on how to build a prosperous and inclusive future for communities affected by mass displacement.
RELIEF Centre
MOOCs
Massive Open Online ‘Collaborations’

• Co-design
• Location video
• Collaborative learning
• Arabic and English
• Blended learning support
• Embed in current practice
• Sustained by the community
Use of MOOCs for RELIEF research aims

Future Education project to:

• co-design professional development with local changemakers and community members
• address key professional development needs for inclusive prosperity
Location filming for video case studies to tell the stories of local solutions
Taking our cameras to interview professionals where they live and work
A MOOC on Renewable Energy to:
• change demand preferences
• advise on technologies
• help with analysing cost-benefits
• raise awareness
• imagine a different future
• make the bridge to citizens
A MOOC on Community-Based Research for the MENA region
In Arabic

Our courses run on the Edraak platform, allowing for participants to learn and contribute in Arabic.
A MOOC on Community-Based Research

The same course runs in English on FutureLearn.

For NGO professionals, International agency workers, teachers, and community professionals.

To support them in co-designing research and developing solutions for local communities.

End of week discussion

Thank you all for your engagement with the course so far, including your interactions with each other. This is very valuable because it helps to create a community of researchers on each of our platforms - Edraak and FutureLearn.

Next week we are holding a live Q & A to see if we can consolidate these connections that are being formed. We would also like to see if we can make connections across the two platforms. We are...
A MOOC on Community-Based Solutions for Renewable Energy?

Based on research in Lebanon by the RELIEF project partners - UCL, LAU, businesses...

For local changemakers: entrepreneurs, investors, employers, citizen scientists, community leaders

To support them in
• understanding the science
• co-designing research
• developing solutions
• tracking the impact

>8,000 active learners on Edraak for our most recent MOOC

OpenLearn course on Climate Change - [Sign up for free](#)...  

In each case, the model simulates the time-evolving change in GMST in response to that particular history of radiative forcing, and this is then compared with the observed temperature record (i.e. Figure 24a). The results of modelling studies of this kind reported in the IPCC TAR are shown in Figure 37. Study the figure and its caption carefully, and then work through the following questions.

**Figure 37**

> Figure 37 Complex climate models have been used to simulate the Earth’s temperature variations over the past 140 years in response to both natural and anthropogenic forcings. The figure shows comparisons between the observed changes and the results of model simulations done with: (a) natural forcing (solar variations and volcanic activity) only; (b) anthropogenic forcing (greenhouse gases and
Participants sharing their local solutions, across countries, across sectors

Participants applied their observation skills to collect data in their local environments, adding a photo and a note to explain their analysis.
We are testing the local inclusion model: Scale up via MOOCs as professional communities of practice, linking to thousands of local learner groups.

- 1 co-designed MOOC enables 10,000 local professionals to use resources and share ideas.

- 10,000 local professionals teach 25 local learners:
  - includes local changemakers, across sectors;
  - they influence their local colleagues, students, employees, communities;
  - they feed back their experiences and findings to the team;
  - collects and curates diverse local solutions.

[Diagram: Ideas and practices flow into Findings, with 10,000 leading to 250,000 (25x10,000).]
Co-design with energy professionals in Lebanon?
A co-design approach to a massive open online collaboration

Workshops with local changemakers: businesses, policymakers, entrepreneurs, investors, employers, educators, citizen scientists, community leaders

→ priorities for curriculum/participants
→ exemplar video case studies

RELIEF team re/draft the design for comment

Film the case study sites, interviews and experts

Finalise the design and marketing
→ the MOOC runs, with mentors
→ team curates contributions for next run

Embed the MOOC and resources in local ‘blended learning’ activities

Track the impact on local communities

https://littlesun.com/

“5 hours in the sun produces 50 hours of light at the dimmest setting or 4 hours at the brightest setting”

What are the renewable energy challenges? solutions? ideas?

Would you join us?
Would you join us?
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