# loT, Big Data and AI: Innovating STEM Teaching Through Strengthening Teacher Professionalisation

# **Thematic Training Session #2:**

"The Implications of Climate Change, Global Warming, and the Future of STEM"

Wednesday, 06 October 2021 | 13:30 – 15:00 (CEST)

Join Us at the Thematic Training Session:

https://zoom.us/j/437007825?pwd=K2I2QU1FdWFkN3YzWEFwNzMrUjBFUT09

Password: classnet

### Introduction

This session is designed to build a good understanding of the key trends and issues related to Climate Change & Global Warming among the teacher participants. These are the session's guiding questions:

- What are the key issues that currently dominate the Climate Change debate? Which issues are important to be covered by the school curriculum?
- What can educators do to raise awareness among their students about Climate Change and create a solid knowledge base & trust in science?
- What is the relevance and what could be the role of STEM subjects in mitigating the challenges (and crisis) of Climate Change & Global Warming?

## **About the Speaker**



Ms Grazyna PULAWSKA Associate Director, Sustainable Development & Public Health Department Asia-Europe Foundation (ASEF)

Grazyna Pulawska joined ASEF in February 2010. She is responsible for the Asia-Europe Environment Forum programme, which aims to strengthen co-operation between Asian and European stakeholders in the field of environmental and sustainable development.

Grazyna worked for the Ministry of Economy in Poland in the field of regional development. She has also been active in the NGO sector, mainly with the Service Civil International network in Belgium and the Development Wheel, a Bangladesh-based NGO specialising in supporting local entrepreneurship and fair trade.

She received her Master's degree in International Relations through a joint programme between the Institut d'Etudes Politiques de Paris and the Warsaw School of Economics.

### **Recommended Resources:**

- 1) "Overview: Weather, Global Warming and Climate Change" by NASA <a href="https://climate.nasa.gov/resources/global-warming-vs-climate-change/">https://climate.nasa.gov/resources/global-warming-vs-climate-change/</a>
- 2) "What's the difference between Climate Change and Global Warming?" by NASA <a href="https://climate.nasa.gov/faq/12/whats-the-difference-between-climate-change-and-global-warming/">https://climate.nasa.gov/faq/12/whats-the-difference-between-climate-change-and-global-warming/</a>
- 3) "Causes and Consequences of Climate Change" by European Union <a href="https://ec.europa.eu/clima/change/causes\_en">https://ec.europa.eu/clima/change/causes\_en</a>
- 4) "How to green the world's dessert and reverse Climate Change" by Allan Savory (A Ted Talk) https://www.voutube.com/watch?v=vpTHi7066pl
- 5) "Visualising a Warming World" by the World Bank https://www.connect4climate.org/infographics/visualising-warming-world
- 6) "What is Action for Climate Empowerment?" by UNFCCC <a href="https://unfccc.int/topics/education-youth/the-big-picture/what-is-action-for-climate-empowerment">https://unfccc.int/topics/education-youth/the-big-picture/what-is-action-for-climate-empowerment</a>
- 7) "Action for climate empowerment: guidelines for accelerating solutions through education, training and public awareness" by UNESCO <a href="https://unesdoc.unesco.org/ark:/48223/pf0000246435">https://unesdoc.unesco.org/ark:/48223/pf0000246435</a>
- 8) "Getting climate-ready: a guide for schools on climate action" by UNESCO https://unesdoc.unesco.org/ark:/48223/pf0000246740
- 9) "Climate change in the classroom: UNESCO course for secondary teachers on climate change education for sustainable development" by UNESCO <a href="https://unesdoc.unesco.org/ark:/48223/pf0000219752">https://unesdoc.unesco.org/ark:/48223/pf0000219752</a>
- 10) "YouthXchange guidebook series: climate change and lifestyles" by UNESCO <a href="https://unesdoc.unesco.org/ark:/48223/pf0000212876">https://unesdoc.unesco.org/ark:/48223/pf0000212876</a>
- 11) "Sustainable Development Goals in STEM Education" by SCIENTIX <a href="https://blog.scientix.eu/2021/02/sustainable-development-goals-in-stem-education/">https://blog.scientix.eu/2021/02/sustainable-development-goals-in-stem-education/</a>
- 12) "Climate Change, STEM, and the Next Generation" by Education Business UK https://educationbusinessuk.net/features/climate-change-stem-and-next-generation
- 13) "UNESCO Associate Schools 4 Climate Action: Documentary" by UNESCO ASPnet <a href="https://www.youtube.com/watch?v=RkoXX4m9wR8&t=1554s">https://www.youtube.com/watch?v=RkoXX4m9wR8&t=1554s</a>
- 14) Gap minder data visualisation https://www.gapminder.org/tools/#\$chart-type=bubbles&url=v1
- 15) IPFCC Report 2021 https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC\_AR6\_WGI\_SPM.pdf
- 16) Data for Climate Action
  <u>The Data Data For Climate Action</u>
- 17) STEM resources on Climate Change https://www.stem.org.uk/climate-change-educational-partnership

- 18) SDG13 UN Report <a href="https://unstats.un.org/sdgs/report/2021/goal-13/">https://unstats.un.org/sdgs/report/2021/goal-13/</a>
- 19) TED talk: Strategies to talk about Climate Change <a href="https://www.ted.com/talks/john marshall">https://www.ted.com/talks/john marshall</a> 3 strategies for effectively talking about climate change?language=en