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## Teaching scientific evidences of climate change to K12 : a key to reach social acceptance of mitigation and adaptation strategies

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Our societies are violently hit by the implications of climate change. The IPCC keeps on waving red flags to the governments since its creation but few progress has been made, most of the proposed decisions do not rely on scientific facts.

Article 12 of Paris agreement requests that states made necessary efforts to inform and educate people. Teaching scientific data on climate change to K12 is our duty to provide them with the required knowledge and competencies to face challenges of the future.

Our proposal is to tackle climate change awareness and training through a global multilevel approach whose starting point is to measure meteorological parameters within the classroom or the school, then reach the use of digital data on climate projections computed by international laboratories.

1. Using a thermometer in primary schools : an easy tool to establish a scientific approach to weather and stimulate student's curiosity to go further. The aim is to bring pupils from the empiric observation of the temperature to quantitative measurements of temperature. It can lead to understand that differences between observed temperatures contribute to the definition / recognition of seasons and their changes across time.
2. Weather-station : one of the best multi-purpose devices for lower secondary schools. It is a visible signal for families, pupils, administrations. Describing the variations in time or in space, smoothly bring the pupils from the weather observed to the parameters of local or regional climate; it is a first approach of the difference between errors and uncertainties.
3. Mathematical models and access to laboratory resources : scientific resource to tackle climate change in upper secondary schools. Even if the equations are too complex for a student to manipulate, students will get access to results computed in laboratories. It will lead to giving an insight to global or regional models and to the scenarios which take into account the long term variation of constraints on the models to build climate projections.

Understanding does not mean blind acceptance and the role of science teachers is to provide the students with the necessary skills and knowledge to be able to understand the climate situation and its evolution. In any case social acceptance will be facilitated when citizens understand the facts and reasons that back uncomfortable decisions or actions.

