

Group 4 project, Physics

Introduction

The central topic for Physics is elements of climate prediction. This must include working with some kind of modelling tools (calculator, Excel, ...) and must include Physical concepts (ask your teacher if you are in doubt). Also it must include global and local elements. In case you have another group 4 subject, this main topic can be integrated with activities in that (Biology / Chemistry).

Planning stage (1 module at school)

In your group Investigate and choose within the following resources:

A primary resource pool for the concrete modelling activities can be:

<http://climateprediction.net/schools/resources.php>.

Choose the curriculum area for the International Baccalaureate:

http://climateprediction.net/schools/resource_IB.php.

Other internet sites presenting tools for climate modelling within your abilities can also be chosen.

Secondary resources must be included, discussing and using modelling results to predict climate changes, global and local. Focus on consequences for your present locality (Denmark) and compare two chosen different localities (e.g. Denmark with your native home locality or e.g. Denmark and India).

Action stage (3 modules at school)

In your group work with the chosen models, discuss results and limitations and relate to a more general discussion of climate predictions (global and local).

Evaluation (1 module at school)

Each group: Share your findings (issues, methods, results, limitations, successes and failures) with the other students of group 4 in a short presentation, for instance using a PowerPoint presentation.

More links and ideas

- Naturvidenskab for alle – Bæredygtig udvikling – det økologiske fodspor. (Danish)
www.nfa.fys.dk
BrugerID: nørre-gym
Password: 2700
- Search Google for English sites about “ecological footprint”
- www.ubu10.dk – Udannelse og bæredygtig udvikling. (Danish)
- <http://www.baltic21.org/> - An Agenda 21 for the Baltic Sea Region
- <http://www.information.dk/153539> - “Danmark kan klare ambitiøse klimamål” (Danish)
- http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm - Stern Review on the economics of climate change
- http://en.wikipedia.org/wiki/Stern_Review - Stern Review (Wikipedia)
- <http://www.energybulletin.net/22176.html> - Review of George Monbiot’s “Heat”

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