

Sustainable Development Goals in Education

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Air pollution, evidence from satellite data & human habits

During Covid 19 Lockdown in Ireland, students had a unique opportunity to measure air pollution levels when people could not and did not move around and drive their car longer than 5km.

They used real world satellite data from EO browser and https://aqicn.org/map/europe/ and https://www.epa.ie/environment-and-you/air/ to gather data, analyse trends and pattern in air pollutant levels and link the trends to human behaviour.

For example, students found that the levels of NO2 were higher in 2019 compared to 2020.

Students made **pollution catchers**, using paper plates and Vaseline, to find and remove particulate matter from the air outside our school.

Students looked at **plants** and their ability to remove carbon dioxide from the atmosphere using our **CO2 monitors** that are in our classrooms to measure ventilation during the COVID-19 pandemic.

Students then measured the **greenhouse effect** of carbon dioxide using beakers, clingfilm, vinegar and bicarb, a lamp and a thermometer.

Despite the endothermic reaction between vinegar and bicarb, the carbon dioxide generated trapped the heat from the lamp.













