



CLIMATE DETECTIVES 2021 – 2022



Operation Powerless
Carysfort National School

RESEARCH QUESTION

How can we reduce the amount of energy our school uses during the school year?

SUMMARY OF PROJECT

With the ongoing existential threat of global warming, our project centered on the amount of energy our school uses on a daily basis. We felt that by highlighting simple measures to reduce the output of energy from the school, we could create a greater awareness of this global problem, but on a more personal scale. We accept that our school's overall carbon footprint can, and needs to be reduced. Decreasing our dependence on fossil fueled energy in our school is the long-term aim of the project. The majority of our research was done through interviews, questionnaires and will continue with ongoing ventures.

Figure 1:

MAIN RESULTS

Upon studying the results we received from our questionnaires in particular, we came to the conclusion that this was a large undertaking and it would take an extended period of time to alter people's habits and increase their awareness of the issues. One of our focal points was school lighting. We asked how often school lighting was actually necessary in classrooms, corridors and other areas. The results surprised us, with half of the staff questioned admitting to using lights all day, regardless of actually lighting requirements in their respective rooms. An awareness of unnecessary lighting around corridors was also a question we posed. A surprising amount of staff claimed to be unaware of unnecessary lighting around the school.

Another point of focus for our project was heaters (radiators) through the school. We counted 33 radiators in the corridors of our school building, not in classrooms but corridors. As part of our interview with the school principal, we posed the question "could this number be reduced?". Our principal agreed that this was an area which could be reviewed. (Obviously with the the Covid pandemic still a daily concern, we took into account extra heat was required around the building due to windows being open and ventilation being key in this regard).

Our main conclusion was that people's habits need to change if we are to address the situation in our school. Only then can we hold any expectations about increasing awareness of similar problems in terms of energy expenditure and warming on a global scale.

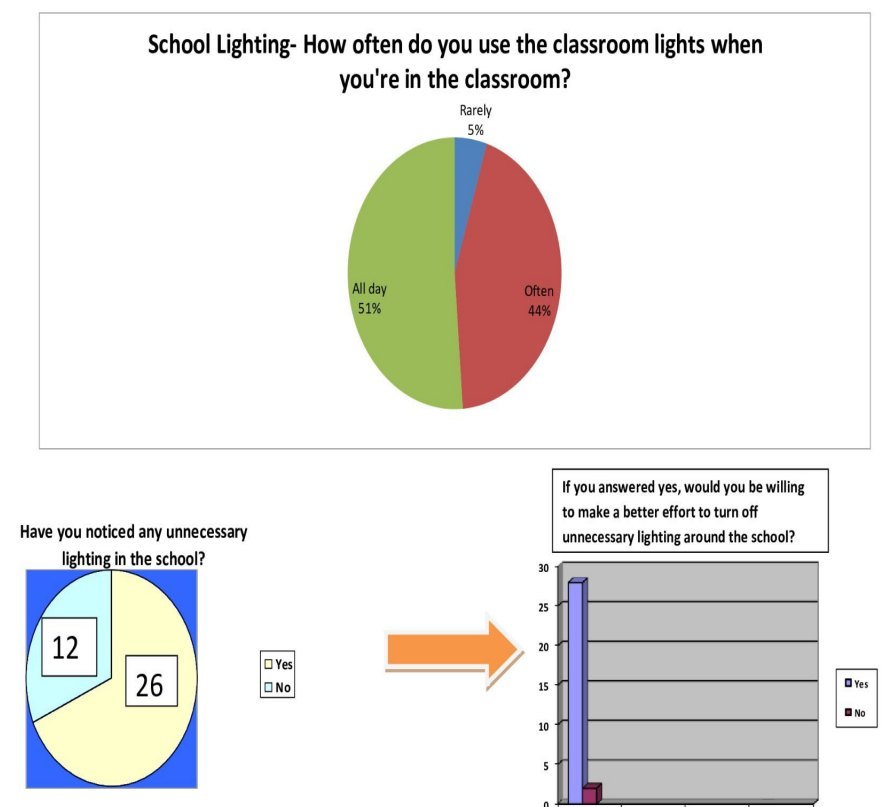


Figure 2: Some of the data we gathered regarding school lighting and electrical devices in our building.

ACTIONS TO HELP LESSEN TO THE PROBLEM

During the month of May, our class will be initiating a mini 'Operation Powerless' in our school. The aim of this initiative is that the school will operate with as little power as possible for an entire school day. This will include no laptop use by staff, no lights in classrooms (where natural light is available), no heat on in the building. If we can achieve this one small step, hopefully it will spark an awareness campaign within our school about our over reliance on fossil fueled energy use. Our next aim will be to place small signs around every light switch in every classroom. The messages will read 'Please turn me off', 'do you really need me' and 'save the planet, give me a rest'. Once again reminding all staff that every little gesture can help if we all work together.

On a larger scale, we have begun investigating the prospect of installing solar panels on the roof of the building. The school principal and board of management support this proposal, which if implemented, will further reduce our school's dependence on fossil fueled resources. This will also highlight the determination and dedication our school has to become more environmentally friendly while reducing our carbon footprint. Finally, it will display how the next generation are taking positive steps to combat the effects of global warming through their actions within their own community.

Figure 3: