



Does St. Joseph of Cluny have high amounts of air pollution within the grounds, and if so are there ways to minimize it?



Introduction

We are located near Dun Laoghaire in Co. Dublin, near the coast. We are on an elevated site. The plans of the private grounds can be seen on the map below. We are an all girls school with a population of 244 at present.

We are a school with 5 Green school flags (almost 6) and therefore have a great interest in the issues of the environment.

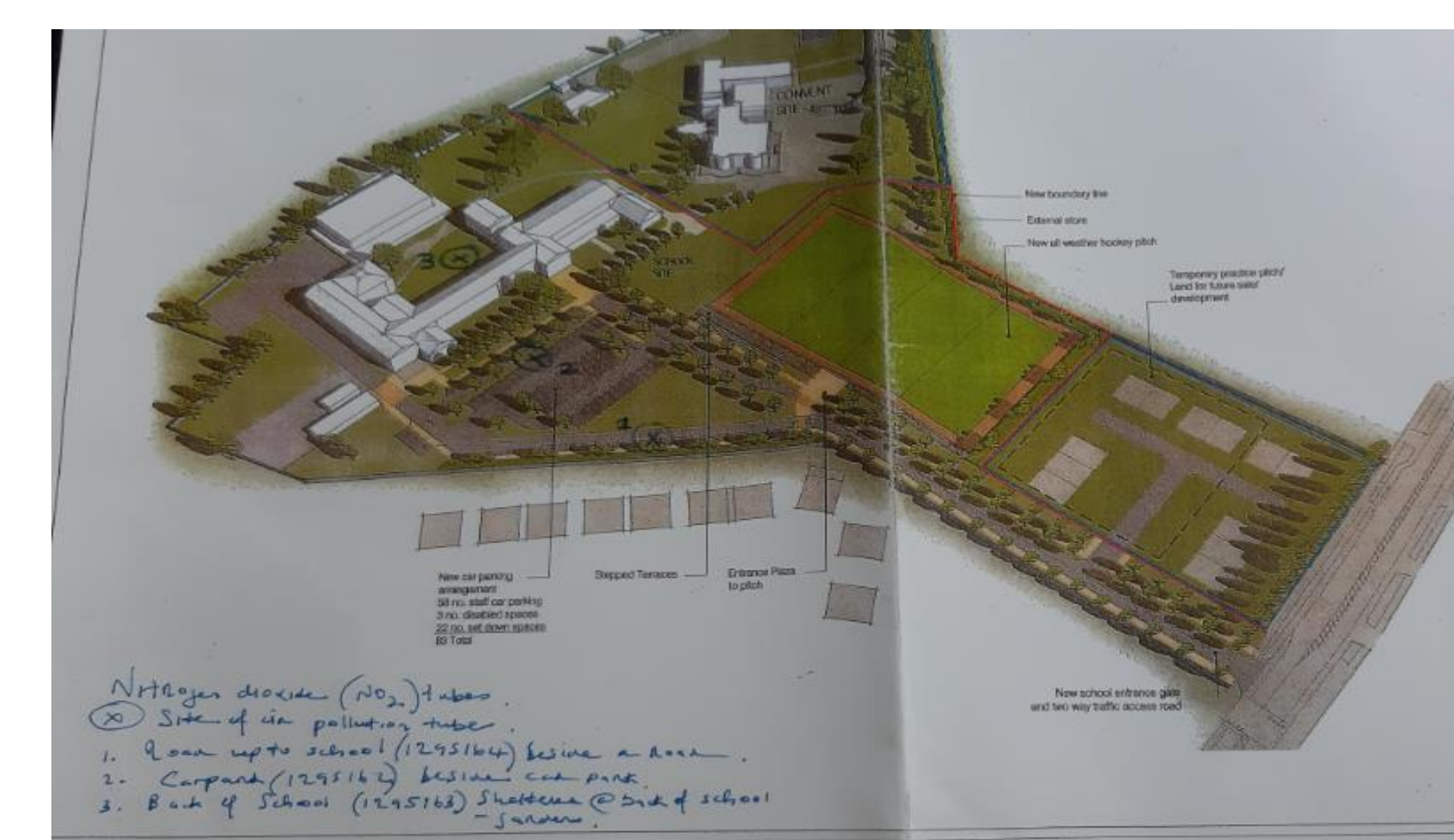
Research Methods

We studied the data provided and were delighted to see we fair very well regarding the Nitrogen dioxide tests.

It was interesting to see that schools of similar size yet with significantly higher Nitrogen dioxide readings (43.61 versus our 12.07) We have a population of 244 and they have a population of 311 yet their reading were significantly higher. Due to the fact they are located in a town made a huge impact on their readings. We are in a suburban area, located on a hill close to the coast, so there would be on shore off shore breezes, which would surely effect our readings.



Field Photos



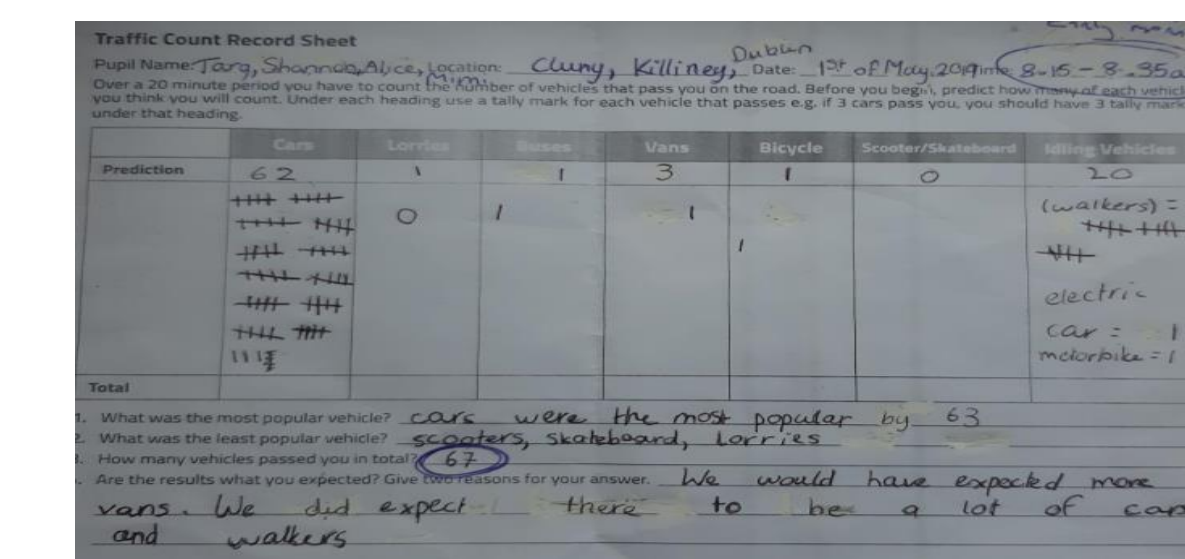
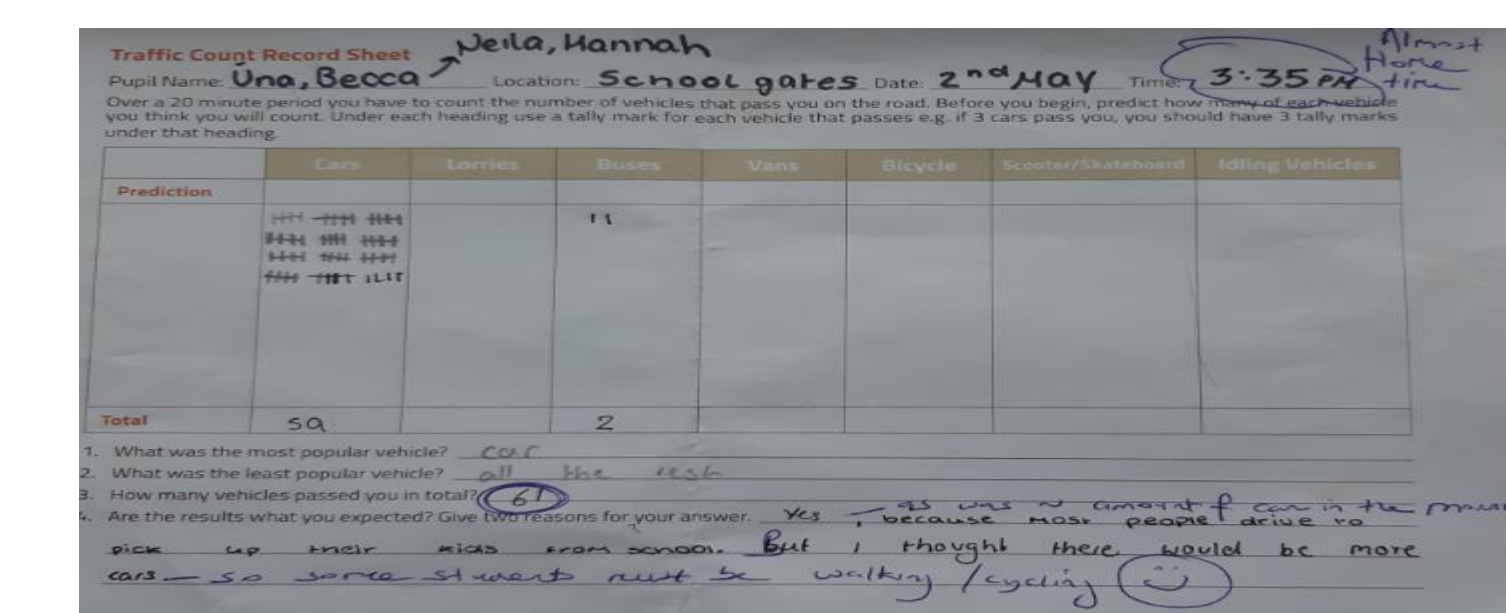
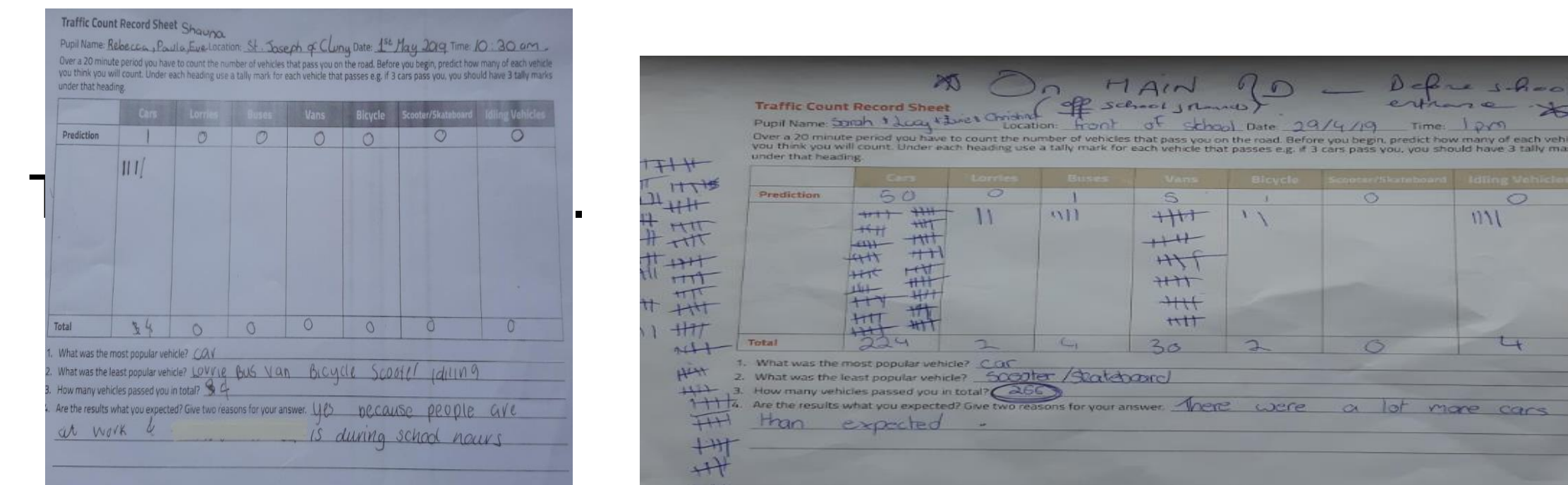
Research Question(s)

It is important to be aware of what is causing or adding pollution to our environment. See far right for images on site.

In doing so we can help negate the effect and try to educate others about the importance of a clean environment and the relationship with toxins and our health.

Is our school environment a healthy one?

Results



| DATE | Monday 20 February 2019 | Tuesday 21 February 2019 | Wednesday 22 February 2019 | Thursday 23 February 2019 | Friday 24 February 2019 |
|----------------------------|-------------------------|--------------------------|----------------------------|---------------------------|-------------------------|
| ATMOSPHERIC PRESSURE (hPa) | 1015 | 1015 | 1015 | 1015 | 1015 |
| RAINFALL (mm) | 0 | 0 | 0 | 0 | 0 |
| CLOUD COVER | 100% | 100% | 100% | 100% | 100% |
| WINDSPEED (km/h) | 22 km/h | 19 km/h | 22 km/h | 24 km/h | 21 km/h |
| OTHER | | | | | |

| DATE | Monday 20 February 2019 | Tuesday 21 February 2019 | Wednesday 22 February 2019 | Thursday 23 February 2019 | Friday 24 February 2019 |
|----------------------------|-------------------------|--------------------------|----------------------------|---------------------------|-------------------------|
| ATMOSPHERIC PRESSURE (hPa) | 1015 | 1015 | 1015 | 1015 | 1015 |
| RAINFALL (mm) | 0 | 0 | 0 | 0 | 0 |
| CLOUD COVER | 100% | 100% | 100% | 100% | 100% |
| WINDSPEED (km/h) | 22 km/h | 19 km/h | 22 km/h | 24 km/h | 21 km/h |
| OTHER | | | | | |

| DATE | Monday 4 March 2019 | Tuesday 5 March 2019 | Wednesday 6 March 2019 | Thursday 7 March 2019 | Friday 8 March 2019 |
|----------------------------|---------------------|----------------------|------------------------|-----------------------|---------------------|
| ATMOSPHERIC PRESSURE (hPa) | 1017 | 1015 | 1015 | 1015 | 1015 |
| RAINFALL (mm) | 0 | 0 | 0 | 0 | 0 |
| CLOUD COVER | 100% | 100% | 100% | 100% | 100% |
| WINDSPEED (km/h) | 12 km/h | 9 km/h | 9 km/h | 12 km/h | 11 km/h |
| OTHER | | | | | |

| DATE | Monday 4 March 2019 | Tuesday 5 March 2019 | Wednesday 6 March 2019 | Thursday 7 March 2019 | Friday 8 March 2019 |
|----------------------------|---------------------|----------------------|------------------------|-----------------------|---------------------|
| ATMOSPHERIC PRESSURE (hPa) | 1017 | 1015 | 1015 | 1015 | 1015 |
| RAINFALL (mm) | 0 | 0 | 0 | 0 | 0 |
| CLOUD COVER | 100% | 100% | 100% | 100% | 100% |
| WINDSPEED (km/h) | 19 km/h | 24 km/h | 23 km/h | 32 km/h | 19 km/h |
| OTHER | | | | | |

Discussion

We looked around at our grounds for any item that may add to air pollution. Overall we did not find any significant pollutants. Traffic would be one of the main causes of air pollution on our grounds.



Conclusions

We are extremely lucky to go to a school that has been tested and given the thumbs up to air quality. We rate in the 'very good' section of the data reports. We hope to continue to encourage walking and cycling to school where possible, and believe this does contribute to the reduced pollution on site, including weather!!!! Recommendation: For towns with higher pollutant levels to engage with local politicians to initiate some kind of community action plan to try and counteract the negative air in the town due to traffic. Prevent adolescent health issues due to pollution.

Bibliography

As per recommended.