# airgradient

Know Your Air, Protect Your Students, Increase Cognitive Performance

### **INTRODUCTION** Why Dust, HEAT and CO2 matter?

# 02

### BENEFITS OF AirGradient

How the system keeps your students healthy and benefits your school

AGENDA



**NEXT STEPS** How to get started!

# Introduction

**N1** 

Why Dust and CO2 matter?

# Today, air pollution is the largest environmental risk factor.

source: https://www.who.int/phe/health\_topics/en/

## Particles

"More than 90% of the world's children breathe toxic air every day."

-World Health Organisation, Oct. 2018

## Serious Health Impacts by Air Pollution for Children

A child who is exposed to unsafe levels of pollution can face a lifetime of health impacts. Exposure in the womb or in early childhood can lead to:





Stunted lung growth Reduced lung function

Increased risk of developing asthma

Acute lower respiratory infections Impaired mental and motor development

Behavioral disorders Low birth weight

Premature birth

Infant mortality

Childhood cancers

Increased risk of heart disease, diabetes and stroke in adulthood

6

썆

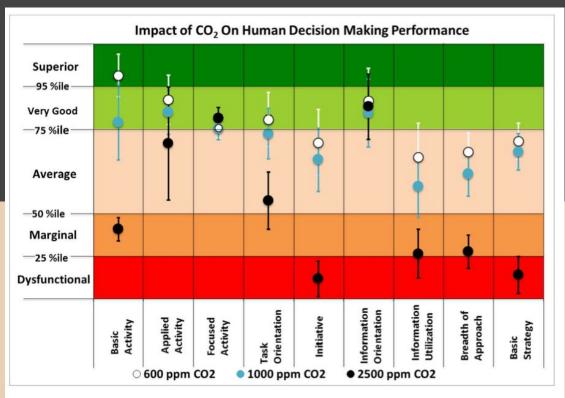
Source: https://www.who.int/phe/infographics/infographics-airpollution-childhealth-3-1200px-EN.jpg?ua=1

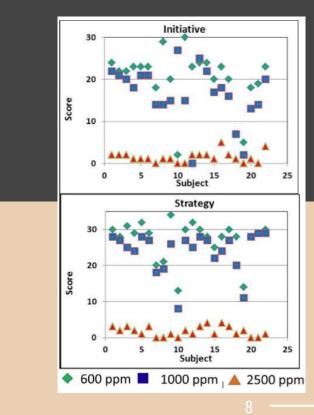
## C02

"CO2 that can be found in classrooms [...] have harmful effects on the body, including affecting cognitive performance"

— The Guardian, July 2019

## Impact of CO2 on Decision Making





Source: Berkeley Lab (https://newscenter.lbl.gov/2012/10/17/elevated-indoor-carbon-dioxide-impairs-decision-making-performance/)

# 02

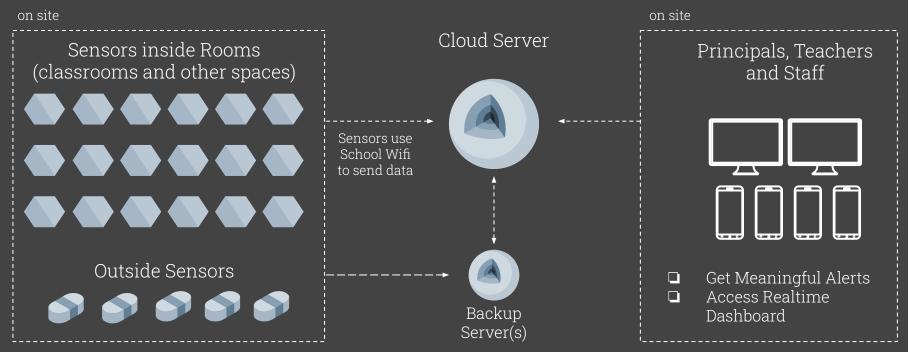
# Benefits of AirGradient

How the system keeps your students healthy and benefits your school

## AirGradient Sensor



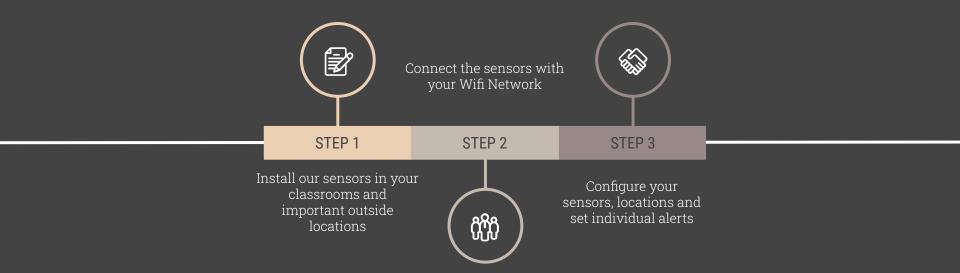
## Sensor Network



You only need to install the sensors, the central server is managed by AirGradient.

11

## THREE EASY STEPS TO KNOW YOUR AIR



No local installation required, service runs on our cloud server.

## FOUR LAYERS OF BENEFITS



Ensure a healthy classroom climate for your students

Get reports about your Air Quality





Build trust among current and prospective parents

Save costs with automized monitoring of the school air



## DYNAMIC MEASUREMENT



Ensure a healthy classroom climate







#### **MEANINGFUL INFORMATION**

See all your outside locations and classrooms on an easy to use dashboard. Dashboard is mobile friendly and can be customized for each user to show the locations they are responsible for.

#### COVERAGE

With the right placement of indoor and outdoor sensors, you can reach a high coverage of your school area and know the exact exposure at any time.

#### ALERTS

Teachers and staff get realtime alerts when the classroom air becomes bad and immediate action can be taken.

### RESULTS

A healthy classroom climate leads to increased cognitive performance, better test scores and long term health benefits.

## WE FOCUS ON THREE MEASURES YOU CAN INFLUENCE\*

\*You should also check your environment for other hazards like SO2, Formaldehyde and Ozone









## Particles

A high amount of small particles (PM2.5) pose a big health risk. **CO2** 

High Carbon Dioxide values have a significant negative impact on students' cognitive performance

## Temperature and Humidity

Getting the right temperature and humidity inside the classrooms will ensure the students feel comfortable.

## MEANINGFUL REPORTS DESIGNED FOR ACTION



Get reports about your Air Quality

#### DAILY, WEEKLY, MONTHLY

Get periodic reports about the inside and outside air quality at your school. Identify rooms with ongoing issues.

#### **BENCHMARKS & COMPARISONS**

See the best and worst performing rooms. See the performance of your air purification system. Continuously improve your campus and decrease your students' exposure

#### **EXPOSURE**

Get an estimate of your students exposure to bad air and comparisons to worldwide standards

#### RESULTS

Meaningful reports makes it easy for you to identify weak areas in the air quality system and implement targeted improvements

## **TRANSPARENCY & TRUST**



Build trust among current and prospective parents

#### TRUST

Build trust among parents by having a systematic school wide air quality monitoring system in place

#### GROW

Attract more students and parents by being known for caring about excellent classroom air

#### SHARE

Make your air quality data accessible to parents on your school website and through social media

#### RESULTS

Your commitment to clean classroom air will create peace of mind for parents and can be an additional growth driver for your school.

## **COSTS & BENEFITS**



Save resources by having full coverage of the school

#### MONITORING SAVINGS

You do not need to have staff engaged with mobile air quality readings and recordings.

#### **NOTIFICATIONS** Relevant staff will be informed automatically with tailored notifications.

#### ANALYTICS

No more manual analysis of air quality data spreadsheets. Get customised & meaningful periodic reports.

**EASY INSTALLATION** Only power and wifi required.

### RESULTS

By having a customised and automated air monitoring system in place you can improve the quality of your monitoring and save costs at the same time.

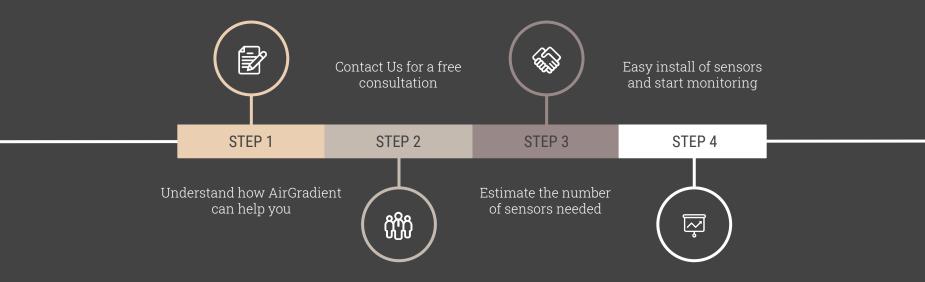
## WHAT MAKES US BETTER!?

- **AirGradient** is specifically **designed for schools**. We offer unique features tailored to schools
- **AirGradient** uses **industrial grade sensors** with high accuracy and **quality** and **precision** is at the heart of the product
- Founder team has **children in high polluted areas**
- We offer **educational material** for students and workshops so that students can learn how to build their own sensors

# Next Steps 03

How to get started!

## A TYPICAL IMPLEMENTATION TIMELINE



# **THANKS!**

Contact us for more details:

support@airgradient.com airgradient.com

