



February 28, 2022

Subject: Indoor Air Quality in Classrooms

Dear Parents and Guardians,

The Ministry of Education (MEQ) recently acquired 90,000 carbon dioxide (CO₂) detectors with the goal of having them installed in all Québec classrooms to ensure rigorous monitoring of indoor air quality.

The school board installs the devices in all classrooms as soon as they are received. These devices measure the concentration of CO₂ in classrooms as well as the temperature and relative humidity. The data thus collected target areas that require remedial action, as the case may be. The collection and analysis of these data also provide a real-time snapshot of comfort settings. School principals can then take the necessary steps to ensure good air quality is maintained in their institution's classrooms. Please note that although the majority of these readers are already installed in our institutions, they are still in the calibration period.

Bear in mind that CO₂ is produced naturally through human breathing and that its presence in school buildings has no health effects. However, CO₂ levels are an indicator of the quality of ventilation and an indicator of comfort. The Ministry aims for an average daily CO₂ concentration of less than 1,000 parts per million (ppm). This target is used to guide air quality improvements in educational institutions in the coming years. Of note, an average daily CO₂ concentration of less than 1,500 ppm is an indicator of adequate ventilation.

To ensure the above-mentioned average daily values are met, two approaches were selected to control the concentration of CO₂ in classrooms:

1. Educational institution staff use the data displayed on the detectors to ensure that CO₂ concentrations in the premises do not exceed 1,500 ppm. Teachers respond directly to optimize the opening of windows and doors as set out in the air quality management protocol;
2. The school board's Buildings and Equipment Department collects and analyzes the daily averages recorded in order to plan and prioritize the various improvements to be made.

The data from the CO₂ readers is also sent to the Ministry of Education, which then establishes the averages. The school board commits to making them available to parents and staff as soon as they are transmitted by the Ministry. The data will be published on our website in the form of tables: one for all the schools of our school board and another for each school (available as of mid-March).

Based on the data obtained to this day, we can confirm that the vast majority of our classrooms have good air quality: 99.7% of the premises recorded a weekly average CO₂ concentration below 1,500 ppm.

We will continue to diligently monitor the data from our institutions. If deficiencies are observed in any facility, i.e., daily average CO₂ concentrations consistently exceed the 1500 ppm threshold over a long period of time, corrective action will be taken.

As part of the management of air quality in our educational institutions, it is important to remember that the MEQ works with public health authorities. Hence, this collaborative approach with independent ventilation and indoor air quality experts aims to maintain well-ventilated school settings over the long term, well beyond the COVID-19 pandemic.

For more information, consult the webpage on air quality in schools at [Québec.ca](https://quebec.ca).

General Directorate



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