OCS Indoor Air Quality Report – Spring 2026

May 18, 2026

Orange County Schools
NORTH CAROLINA

What is Indoor Air Quality (IAQ)?

Indoor Air Quality refers to the condition of the air inside buildings—especially as it affects the health and comfort of the people inside.

Testing is the process of measuring and analyzing the air inside a building to identify pollutants, contaminants and overall air conditions.

The goal is to ensure a clean, healthy and safe environment for all the building's occupants.

IAQ Process

Measuring, Sampling & Inspection - Humidity, temperature and carbon dioxide (CO_2) are measured. Air samples are collected. Visual inspections take place throughout the building.

Laboratory Assessment - Air Samples are sent to a laboratory for analysis. The result of this analysis is a report that provides data on spores found in the sample.

IAQ Rating - The humidity, temperature and carbon dioxide measurements, laboratory analysis and report of visual observations are reviewed to determine a rating.

IAQ Measurements

- Measuring humidity, temperature & carbon dioxide (CO_2)
  - The EPA recommends humidity in the range of is 30% to 50%.*
    - Humidity measurements can be impacted by open windows, ineffective or underutilized HVAC systems, leaks.
  - OSHA recommends temperatures in the range of 68° to 76°F.**
  - Ideal indoor levels are below 1,000 ppm.
    - Levels at or below 1,000 ppm are ideal for the alertness and concentration of building occupants.
    - Ideal CO2 levels can be maintained through proper ventilation.

* https://www.epa.gov/indoor-air-quality-iaq/care-your-air-guide-indoor-air-quality

** https://www.osha.gov/node/57113

IAQ Inspection

- Inspecting for potential water damage, water intrusion.
  - Water damage which can impact indoor air quality.
  - Water damage can be caused by leaks (from plumbing or the exterior), condensation and elevated humidity.
  - Identifying conditions related to water damage and intrusion will limit additional damage, poor air quality and potentially more costly repairs/remediation.

IAQ Sampling

Spores

- Wide range of species and types; some expected to be in indoor areas and others not ideal for indoor areas.
- Exact number and type can be ascertained through laboratory analysis.
- Ideal methodology for identification is through air sampling.
- It is recommended that visible organic growth be remediated, no matter the type.

IAQ Ratings

Very Good: Optimal or excellent air quality and environmental conditions.

Good: Adequate air quality and environmental conditions.

Fair: Air quality affected or potentially affected by environmental conditions outside of ideal ranges.

Poor: Inadequate air quality due to microbial growth, contamination and environmental conditions outside of ideal ranges.

IAQ Ratings

Very Good	Good	Fair	Poor
Central Elementary	Cedar Ridge High	A.L. Stanback Middle	
Efland Cheeks Elementary	Grady Brown Elementary	Orange High	
	Gravelly Hill Middle		
	Hillsborough Elementary		
	New Hope Elementary		
	Orange Middle		
	Pathways Elementary		
	Partnership Academy		
	River Park Elementary		

IAQ Comparison

School	Spring 2025	Fall 2025	Spring 2026
A.L. Stanback Middle	Good	Fair	Fair
Cedar Ridge High	Very Good	Good	Good
Central Elementary	Fair	Good	Very Good
Efland Cheeks Elementary	Good	Good	Very Good
Grady Brown Elementary	Very Good	Very Good	Good
Gravelly Hill Middle	Very Good	Fair	Good
Hillsborough Elementary	Fair	Fair	Good
New Hope Elementary	Good	Good	Good
Orange High	Good	Good	Fair
Orange Middle	Fair	Good	Good
Partnership	Good	Good	Good
Pathway Elementary	Good	Good	Good
River Park Elementary	Good	Good	Good

Action Plan for Schools Rated “Fair”

- Make HVAC adjustments to attain “Good” CO_2 levels and temperature range.
- Investigate and address moisture intrusion.
- Address reported organic growth.
- Take updated samples after environmental adjustments have been made.

Service and Maintenance Recommendations

- Maintaining optimal air humidity levels.
  - Elevated humidity can lead to organic growth and cause secondary damage from condensation.
- Regular vent and air return cleanings.
- Identifying and fixing potential exterior leaks and sources of water intrusions.
- Ensure proper ventilation to reduce CO_2 levels.
- Identify source/cause of damaged ceiling tiles and replace.

Operations Preventative Maintenance

The OCS Maintenance Division is committed to preventative maintenance to avoid degradation of indoor air quality and more costly repairs. Ongoing measures include:

- Air filter exchange, every 90 days.
- Vent cleanings, quarterly.
- Coil cleaning, every 2 years or as needed.
- Ductwork cleaning, every 5 years.
- Remediation plans for roof leaks and other water-related issues.

Questions?

Orange County Schools

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ENGAGE. CHALLENGE. INSPIRE.

Appendix

IAQ Recap

Recap of the air quality assessment Fall of 2025

Poor	Fair	Good	Very Good
	A.L. Stanback Middle	Central Elementary	Grady A Brown Elem.
	Gravelly Hill Middle	Cedar Ridge High	
	Hillsborough Elementary	Efland Cheeks Elementary	
		New Hope Elementary	
		Orange High	
		Partnership Academy	
		Pathways Elementary	
		River Park Elementary	

IAQ Recap

Recap of the air quality assessment Spring of 2025

Poor	Fair	Good	Very Good
	Central Elementary	A.L. Stanback Middle	Cedar Ridge High
	Hillsborough Elementary	Efland Cheeks Elementary	Grady A Brown Elem.
	Orange Middle	New Hope Elementary	Gravelly Hill Middle
		Orange High	
		Partnership Academy	
		Pathways Elementary	
		River Park Elementary	