



Real Schools, Real Challenges— Finding Solutions with the *IAQ Tools for Schools* Framework and Connector

Wednesday, February 17, 2010
1:00 – 2:00 PM EST

Access Number!

Note: To hear the audio portion of the Webinar,
you must call the number below.

Dial: (866) 299-3188
Access code: 202.343.9399#



Indoor Air Quality (IAQ)

Introductions

IAQ Design Challenge School Districts

- C.U.S.D. 95 Lake Zurich, Lake Zurich, IL
- Memphis City Schools, Memphis, TN
- The School District of Philadelphia, Philadelphia, PA
- Schodack Central School District, Castleton-on-Hudson, NY
- Louisiana Recovery School District, New Orleans, LA



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Introductions

- Tracy Enger, Indoor Environments Division, U.S. EPA
- Faculty School Districts
- IAQ Design Challenge School Districts
- Regional Representatives



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Welcome

- Review the *IAQ Tools for Schools* Framework: Key Drivers and Technical Solutions
- Learn How You Can Benefit From the Guidance Developed for Our IAQ Design Challenge School Districts
- Put Learning Into Action Year-Round with the Connector, Plus New Tools and Resources



Indoor Air Quality (IAQ)

Introductions

Faculty

- Baltimore County Public Schools, MD
- Blue Valley School District, KS
- Charlotte-Mecklenburg Schools, NC
- Hartford Public Schools, CT
- Katy Independent School District, TX
- Newark Public Schools, NJ
- North East Independent School District, TX
- The School Board of Broward County, Florida, FL
- West Carrollton School District, OH



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Symposium Agenda Overview – *The Complete Picture*

IAQ Collaborative Design Process



Report Outs



Day 1 – Morning → Day 1 – Afternoon → Day 2 → Day 3

Framework: Key Drivers



Framework: Technical Solutions





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Day 1 Morning – IAQ Collaborative Design Process

Day 1 – Morning Day 1 – Afternoon Day 2 Day 3

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Day 3 – Sharing Recommendations: IAQ Tools for Schools Network in Action

Day 1 – Morning Day 1 – Afternoon Day 2 Day 3

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Day 1 Afternoon – Putting a Program in Place

Day 1 – Morning Day 1 – Afternoon Day 2 Day 3

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Epic Journey Life Lessons

- You Are Never Alone
- Others Have Charted the Course
- Leadership in Service
- Teams Can Do What Individuals Cannot

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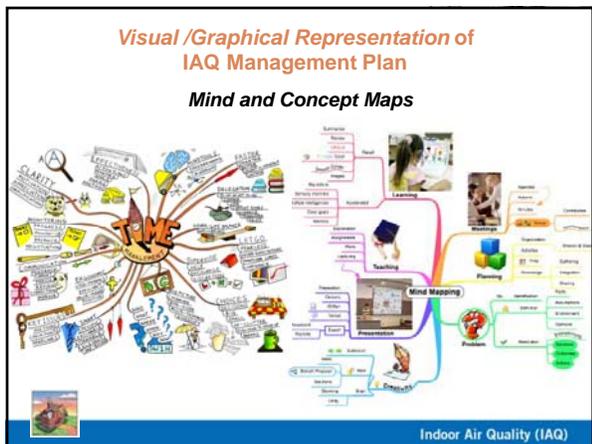
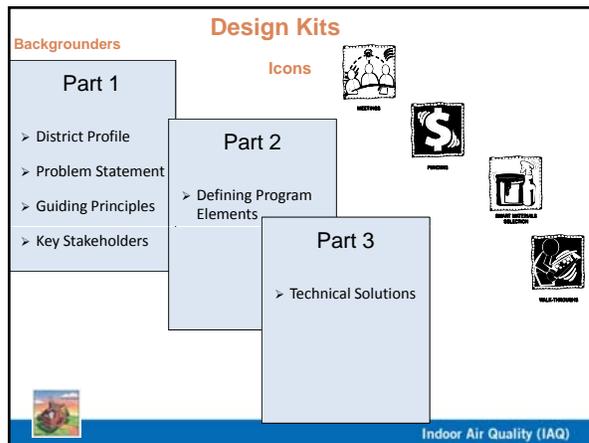
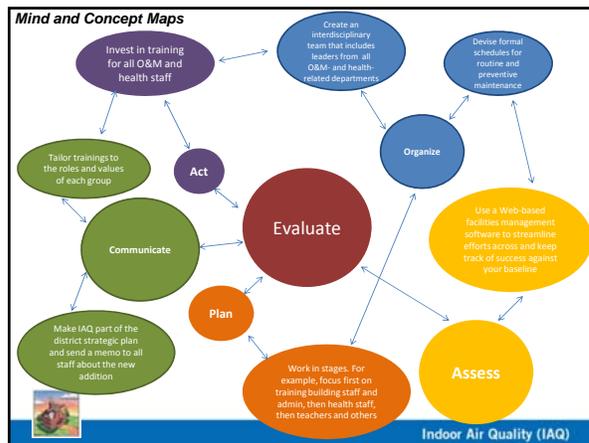
Day 2 – Installing the Best Technical Solutions

Day 1 – Morning Day 1 – Afternoon Day 2 Day 3

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The IAQ Tools for Schools Network – Live!

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Gallery – Sharing Solutions



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The IAQ Tools for Schools Network – In Action!



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Open Gallery – Sharing Solutions



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The Framework for Effective School IAQ Management: Putting in Place the Pieces that Work



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The IAQ Tools for Schools Network – In Action!



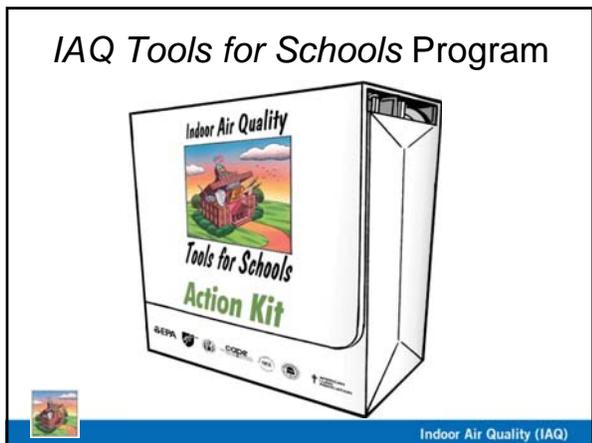
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Day 1 Afternoon – Putting a Program in Place

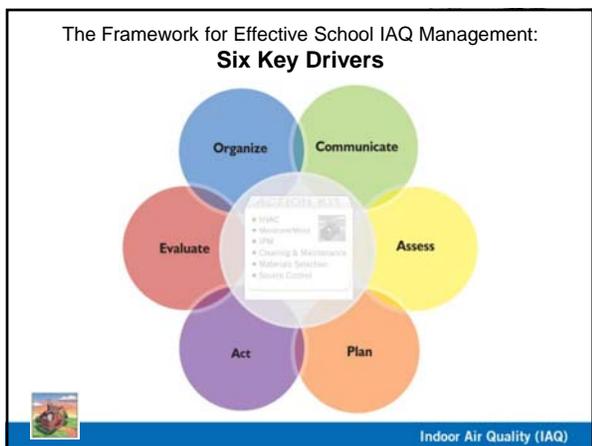


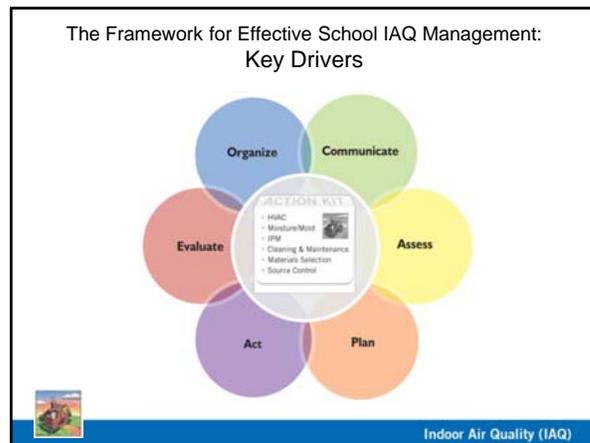
Day 1 – Morning Day 1 – Afternoon Day 2 Day 3

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- ### School IAQ: Mastering the Framework
- Design to Sustain Action
 - Be in Action for Results
 - Install the Best Solutions
- Indoor Air Quality (IAQ)



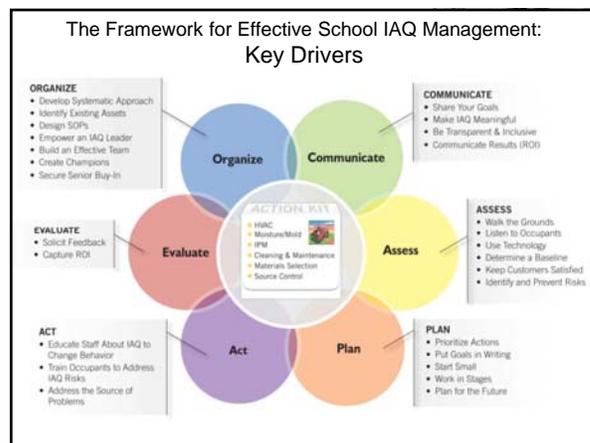


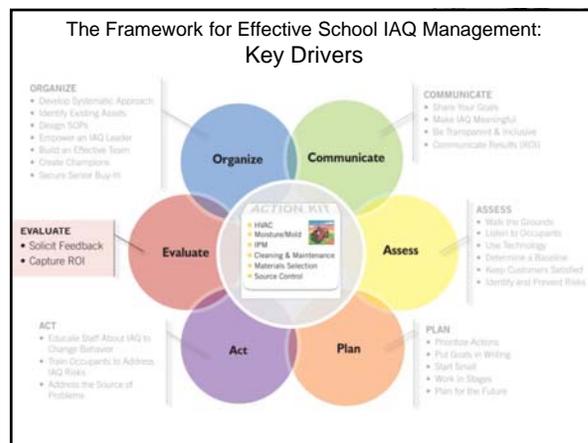
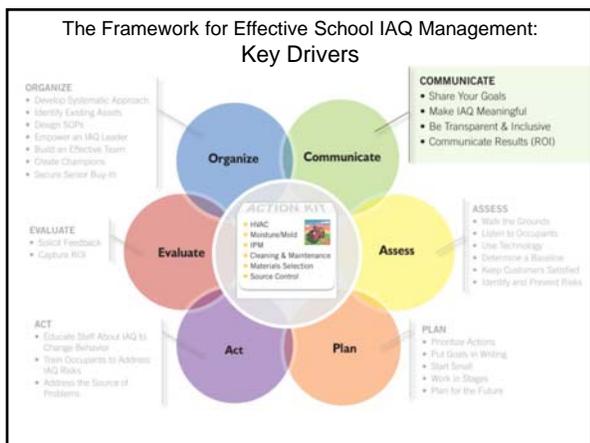
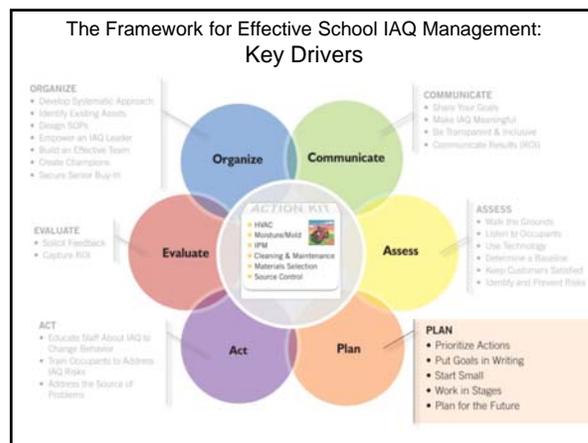
II. Current Condition/Problem Statement

b. Use the chart below to identify your current strengths, weaknesses, opportunities, and threats.

Key Drivers for Success	Strengths	Weaknesses	Opportunities	Threats
1. Organize				
2. Communicate				
3. Assess				
4. Plan				
5. Act				
6. Evaluate				

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Question: How do you see the Framework: Key Drivers implemented in your school district?

1. Address 6 Key Drivers in our comprehensive IAQ program
2. Address 6 Key Drivers but no comprehensive IAQ program
3. Address some Key Drivers and excited to learn more



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5 Minute Mentor

Technical Solution	Faculty	IAQ Design Challenge School District
HVAC	Blue Valley	Philadelphia
Mold and Moisture	Charlotte	New Orleans
Integrated Pest Management	Charlotte	New Orleans
Cleaning and Maintenance	NEISD	Lake Zurich
Materials Selection	NEISD	Memphis
Source Control	Blue Valley	Schodack



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Moving From Theory to Practice: Implementing Technical Solutions



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The Framework for Effective School IAQ Management




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Day 2 – Installing the Best Technical Solutions

ACTION KIT

- ★ HVAC
- ★ Moisture/Mold
- ★ IPM
- ★ Cleaning & Maintenance
- ★ Materials Selection
- ★ Source Control





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The Framework for Effective School IAQ Management: **Six Technical Solutions**




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The Framework for Effective School IAQ Management: Six Technical Solutions

Quality HVAC

- Inspect HVAC systems regularly
- Establish a maintenance plan
- Change filters regularly and ensure condensate pans are draining
- Provide outdoor air ventilation according to ASHRAE Standard or local code
- Clean air supply diffusers, return registers, and outside air intakes
- Keep unit ventilators clear of books, papers, and other items

Control of Moisture/Mold

- Conduct routine moisture inspections
- Establish mold prevention and remediation plan
- Maintain indoor humidity levels between 30% and 60%
- Address moisture problems promptly
- Dry wet areas within 24-48 hours

Strong Integrated Pest Management (IPM)

- Inspect and monitor for pests
- Establish an IPM plan
- Use spot treatments and baits
- Communicate with occupants prior to pesticide use
- Mark indoor and outdoor areas treated with pesticides

Effective Cleaning & Maintenance

- Conduct routine inspections of school environment
- Develop a preventative maintenance plan
- Train cleaning/maintenance staff on protocols
- Ensure material safety data sheets (MSDS) are available to staff
- Clean and remove dust with damp cloth
- Vacuum using high-efficiency filters

Smart Materials Selection

- Maintain products inventory
- Develop low-emitting products purchasing and use policies
- Use only formaldehyde-free materials
- Use only low-toxicity and low-emitting paint
- Select products based on product rating systems
- Use least toxic cleaners possible (only those approved by the district)

Aggressive Source Control

- Conduct regular building walkthrough inspections
- Test for radon; mitigate if necessary
- Implement a hazardous materials plan (use, label, storage and disposal)
- Implement Smoke-Free policies
- Establish an anti-idling school bus policy
- Use walk-off mats at building entrances
- Conduct pollutant-releasing activities when school is unoccupied

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IAQ Tools for Schools Connector

- Mentorship
- Webinars
- E-mail Updates
- Listserv



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Question: Which Technical Solution shows up the strongest in your program?

1. Quality HVAC
2. Control of Mold/ Moisture
3. Strong Integrated Pest Control
4. Cleaning and Maintenance & Smart Materials Selection
5. Aggressive Source Control

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IAQ Tools for Schools Connector

- Provides year-round connection, interaction, and inspiration to achieve success.
- New tools and resources available to help you make measurable progress on your journey.

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Question: Which Technical Solution would you like additional guidance on from the IAQ Tools for Schools Network?

1. Quality HVAC
2. Control of Mold/ Moisture
3. Strong Integrated Pest Control
4. Cleaning and Maintenance & Smart Materials Selection
5. Aggressive Source Control

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IAQ Tools for Schools Network – In Action!

- New Tool: Asset Mapping
- Jumpstart Your Success
- Identify Your School Districts Strengths, Weaknesses, Opportunities, and Threats
- Encourage Your IAQ Management Team to Think and Speak Using the *IAQ Tools for School Framework*

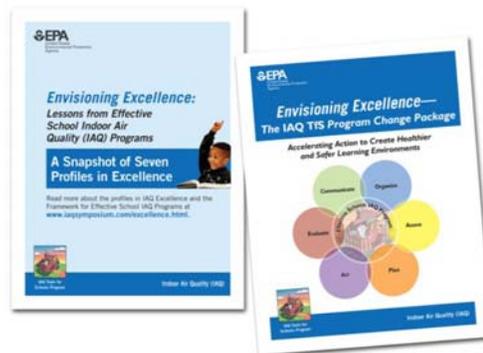
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Asset Mapping – In Action!

- Evaluate your comprehensive *IAQ Tools for Schools* Management Plan



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II. Current Condition/Problem Statement

6. Use the chart below to identify your current strengths, weaknesses, opportunities, and threats.

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Requests and Offers

- What do you need from our Network to Install Solutions in your school district?
- What can you offer to others to help them achieve better IAQ management outcomes?



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EPA
NATIONAL SYMPOSIUM
IAQ Management Action Plan

I am excited to travel on this journey to a new future for IAQ management in my work. My destination is...

The new strategies, ideas and approaches I have heard to guide me to my destination are...

To put what I learned into action, I am going to:

In order to reach my destination and to help others reach theirs as well, I am making these requests and offers:



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Resources

- Schools IAQ Connector Listserv:
 - Send a blank e-mail message to schools_iaq_connector_subscribe@lists.epa.gov or
 - Request subscription online on the Listserv Web interface https://lists.epa.gov/read/all_forums/subscribe?name=schools_iaq_connector. Then, check your e-mail inbox for your confirmation and membership details.
- IAQ Tools for Schools Updates and E-mails:
 - Send an e-mail to: IAQTfSConnector@cadmusgroup.com
 - View archives at: <http://www.epa.gov/iaq/schools/bulletins.html>



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Resources

- Webinar Archives:
<http://www.epa.gov/iaq/schools/webconferences.html>
 - Regional Resources Webinar Archives –
http://www.epa.gov/iaq/schools/pdfs/webconferences/may_14_2009.pdf
- Regional Resources:
<http://www.epa.gov/iaq/whereyoulive.html>



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Resources

- *IAQ Tools for Schools* Program
www.epa.gov/iaq/schools
- *IAQ Tools for Schools* Envisioning Excellence
www.epa.gov/iaq/schools/excellence.html
- National Map of Award Winners
www.epa.gov/iaq/schools/nationalmap.html



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