

Story of a Building

October 20, 2023

MSBA's Post Occupancy Evaluation Program (POE)

POE Program Overview

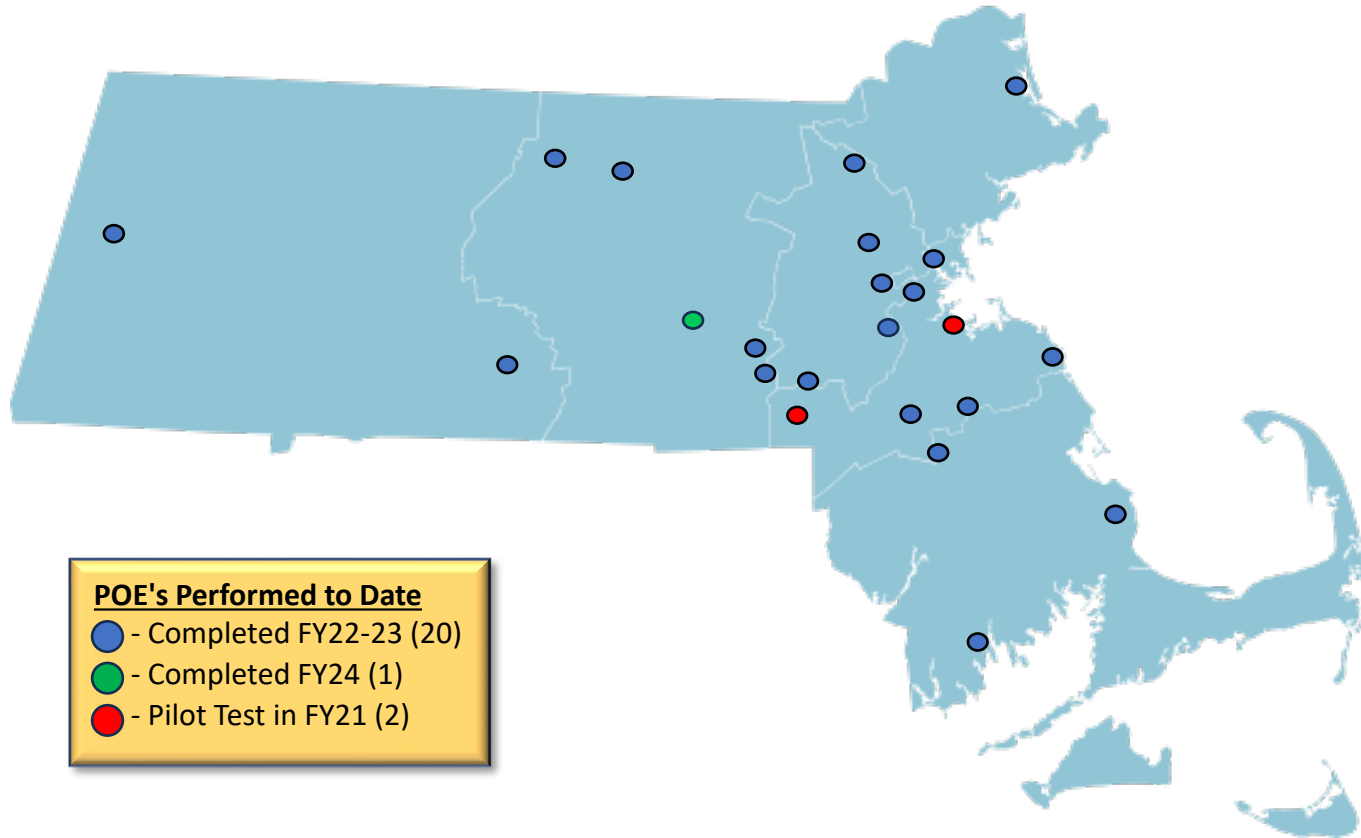
Program Goal

To assist the MSBA in understanding that state-funded K-12 school building projects are *operating as intended and performing as designed*.

Program History

- *April 2020*: Program approved by MSBA Board of Directors in April 2020.
- *Summer 2020 – Summer 2021*: Program development and testing.
- *September 2021*: District participation begins.

POE Program Participants (through 10/23)



POE Program Participants (through 10/23)



Central MS
Quincy (Pilot)



Franklin HS
Franklin (Pilot)



Lester J. Gates MS
Scituate



Marathon ES
Hopkinton



Co-Located PK/MS/HS
Abington



East Meadow ES
Granby



Clarke Ave MS
Chelsea



Early Childhood Education Ctr
Dedham

POE Program Participants (through 10/23)



Ai3 - 2017

Plymouth South HS
Plymouth



Ai3 - 2016

Athol Community ES
Athol-Royalston RSD



HMFH - 2018

Florida Ruffin Ridley
Brookline



P+W - 2019

Memorial HS
Billerica



T2 - 2017

Irwin M. Jacobs ES
New Bedford



DRA - 2018

Taconic HS
Pittsfield



TAPPE - 2019

Clyde F. Brown ES
Millis



KAESTLE BOOS - 2019

Minuteman RVTHS
Minuteman RSD

POE Program Participants (through 10/23)



SMMA - 2019

Templeton ES
Narragansett RSD



D&W - 2019

Pine Grove ES
Triton RSD



DRA - 2019

Stoughton HS
Stoughton



HMFH - 2016

Woodland ES
Milford



DINISCO - 2019

Cabot ES
Newton



FLANSBURG - 2015

West Bridgewater MSHS
West Bridgewater



LPA - 2016

Lincoln Street ES
Northborough

And more to come...

Communicating the Data and Lessons-Learned

Data Collection Tactics

- Pre-visit Data Gathering & Review
- Satisfaction Survey (feedback from building occupants & stakeholders)
- Site Visit (observations by professionals)

Reporting Formats

- Individual Building Reports
- Data Dashboards
- Roundtables & Other Public Presentations
- Etc.

Stakeholders

- MSBA Board
- MSBA Staff
- School District Staff
- Building Occupants
- OPMs
- Designers
- Cx Consultants
- Contractors
- Taxpayers
- Etc.

POE Preliminary Findings

Teaching & Learning Environment

- Spatial flexibility: actual vs. intended space utilization
- Current vs. projected enrollment
- And more...

Building Environment

- Durability and maintainability of materials
- Roof access
- Building management system
- HVAC design & controls
- Lighting design & controls
- And more...

Site Environment

- Vehicular & pedestrian circulation
- Landscaping
- Drainage
- Snow removal
- And more...

Energy Performance

- Staff availability to manage energy performance
- Staff access to performance data
- User behavior
- And more...

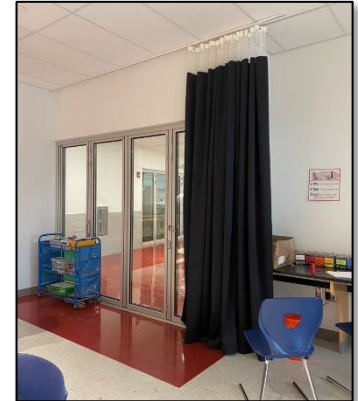
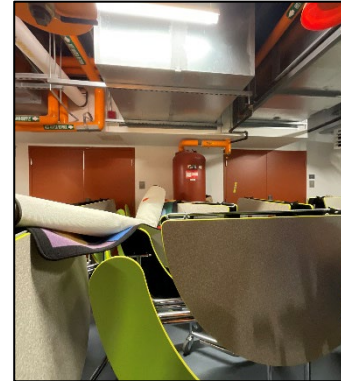
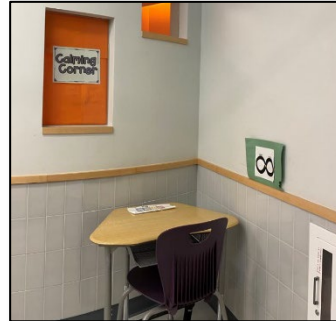
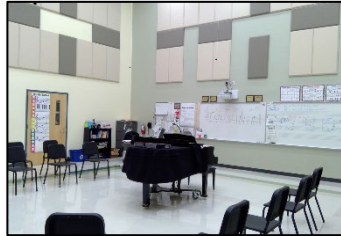
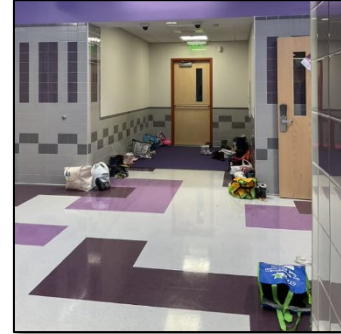
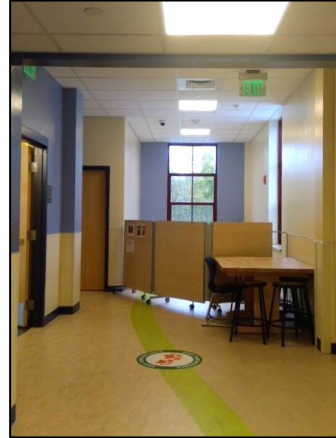
Operations & Maintenance

- Staff training
- Staff turnover
- Actual vs. projected operating budget
- And more...

POE Preliminary Findings

Teaching & Learning Environment

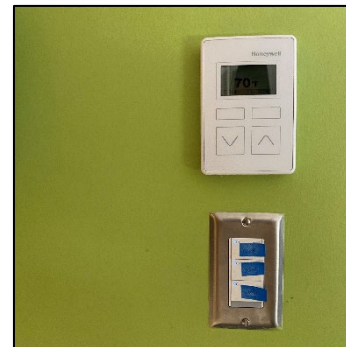
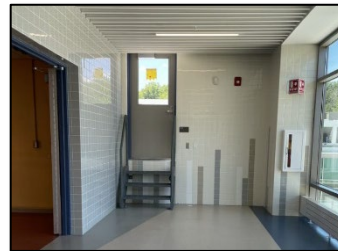
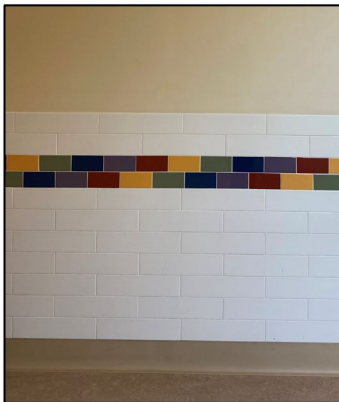
- Dedicated science and specials spaces works well.
- Spaces have been repurposed to support changing program needs.
- Not enough storage.
- Teachers appreciate some design elements but not others.
- And more...



POE Preliminary Findings

Building Environment

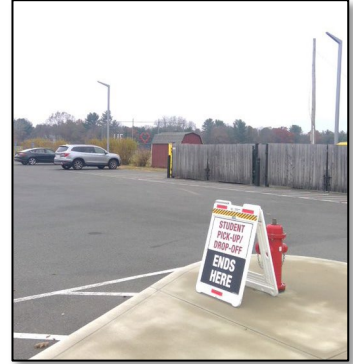
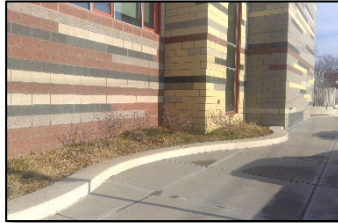
- Temperature is either too hot or too cold.
- Materials are durable and easy to maintain (or the opposite).
- Roof access is poor and/or roof is leaking.
- Challenges with system controls.
- And more...



POE Preliminary Findings

Site Environment

- Outdoor spaces are a community amenity.
- Type and/or scale of landscaping is challenging to maintain.
- Playgrounds need shade devices, must be durable.
- Site circulation may require modifications and/or redesign.
- And more...



POE Preliminary Findings

Energy Performance

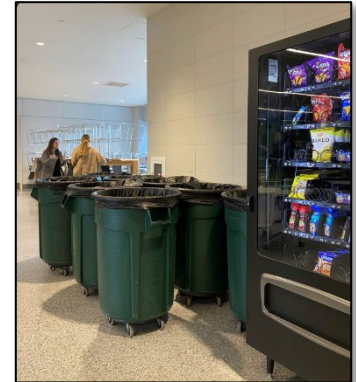
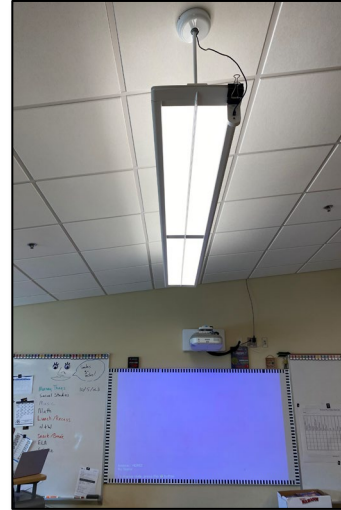
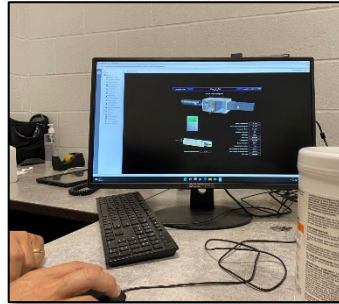
- Submeters are installed but not monitored.
- Utility information is unavailable and/or not being tracked.
- EV charging stations are not connected.
- Solar panels are not installed.
- Occupant behavior may conflict with energy use goals.
- And more...



POE Preliminary Findings

Operations & Maintenance

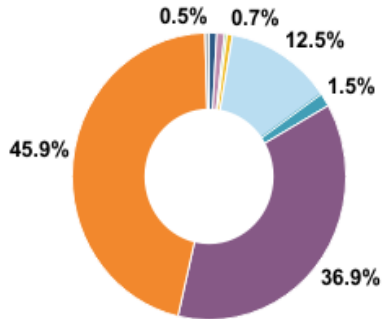
- Training was rushed, poorly timed and/or incomplete.
- System design is highly complex, requires skills staff may not have.
- Components are out of warranty and parts are hard to find.
- Trash receptacles are rarely used as designed.
- And more...



POE Survey Data (through 10/23)

Survey Response Breakdown

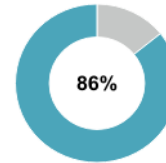
Total Survey Responses: 4,143



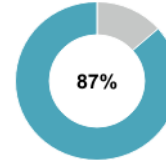
District leadership	37
School leadership	38
Administrative Support	12
Facilities/Maintenance	27
Licensed Professional	519
Paraprofessional	63
Student	1,527
Parent	1,901
Other	19

Educational Findings

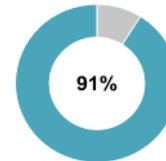
School supports **students' learning needs**



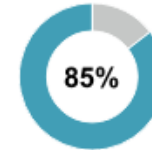
School supports **productivity**



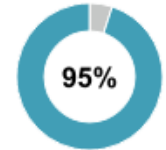
School design **responds to curriculum**



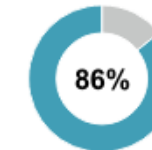
Learning Environment Satisfaction



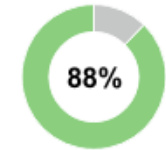
Teacher/Staff Satisfaction



Leadership/District Satisfaction



Parent/Guardian Satisfaction

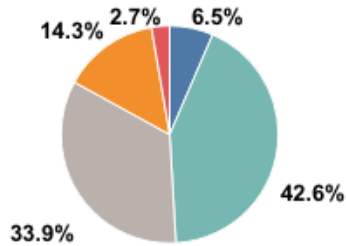


% students like their classroom

POE Survey Data (through 10/23)

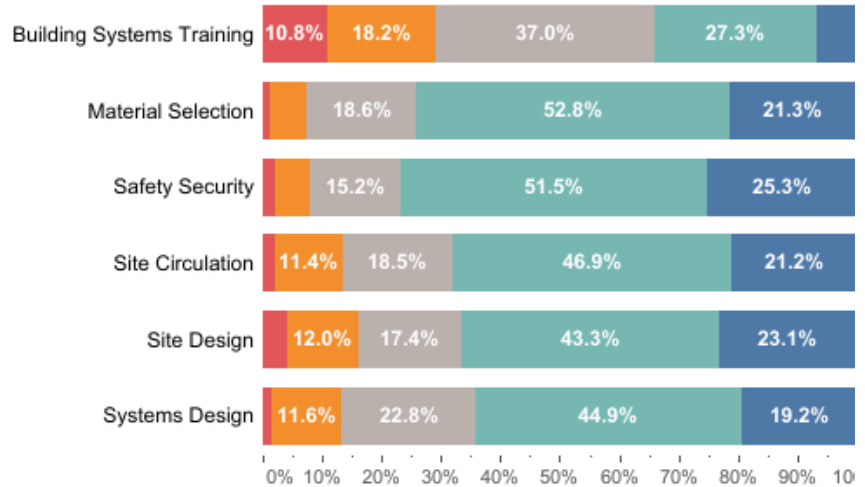
Building Systems Use

The building systems are easy to use and operating as intended



- Strongly Agree
- Agree
- Neutral Agree
- Disagree
- Strongly Disagree

Overall Satisfaction by Component



- Strongly Agree
- Agree
- Neutral Agree
- Disagree
- Strongly Disagree

Potential Topics to be Considered for the Spring '24 Story of a Building

Training

- Planning and coordination to receive thorough training.
- Planning and budgeting to provide re-training over time.
- Ensuring quality and appropriate scope and audience for training.

Landscaping

- Considering long-term staffing and budget required for landscape maintenance.
- Ensure appropriate balance of aesthetic and performance goals.
- Involve facilities and finance staff in decision-making.

Other Topics

- Ideas?

Thank You!

Please reach out if you have follow-up questions:

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