

A4LE Northeast | April 28, 2023

# **Teacher First Design: Decentering Learning Environments to Promote Healthy Workplaces**

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**Perkins&Will**



## Who We Are

EDUCATION



**Dr. Wenimo Okoya**  
Founder & Executive Director  
Healing Schools Project

ARCHITECTURE



**Brooke Trivas**  
K-12 Practice Lead  
Perkins&Will

PUBLIC HEALTH



**Dr. Erika Eitland**  
Director, Human Experience Lab  
Perkins&Will

# Agenda

**Why Teaching  
Spaces at A4LE?**



**Promoting  
Healthy  
Workplaces  
through Design**



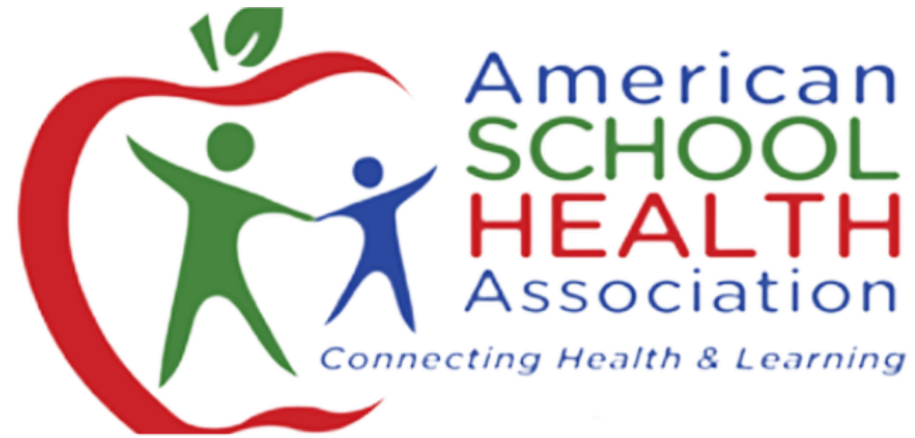
**What our current  
approach lacks?**



**Community Circle  
to Action**

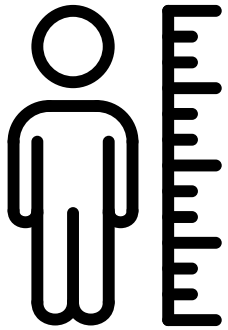
# Setting the Stage

*Why Teacher-First?*

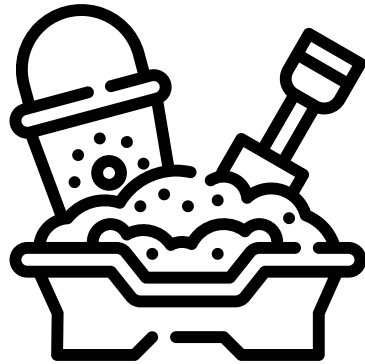


**School Health is the comprehensive efforts of developing, implementing, and evaluating services, both within the school and the community, that provide **each and every student** with the resources needed to thrive within a healthful environment.**

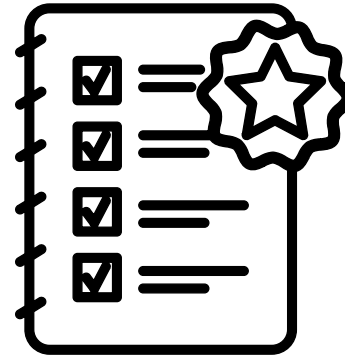
# How do we define healthy learning environments?



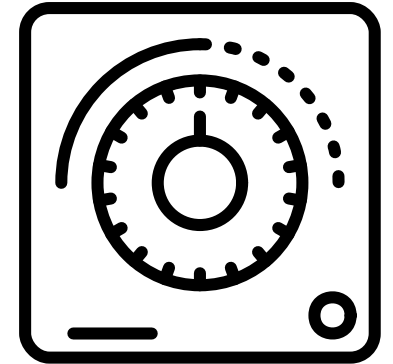
Physiology



Behavior

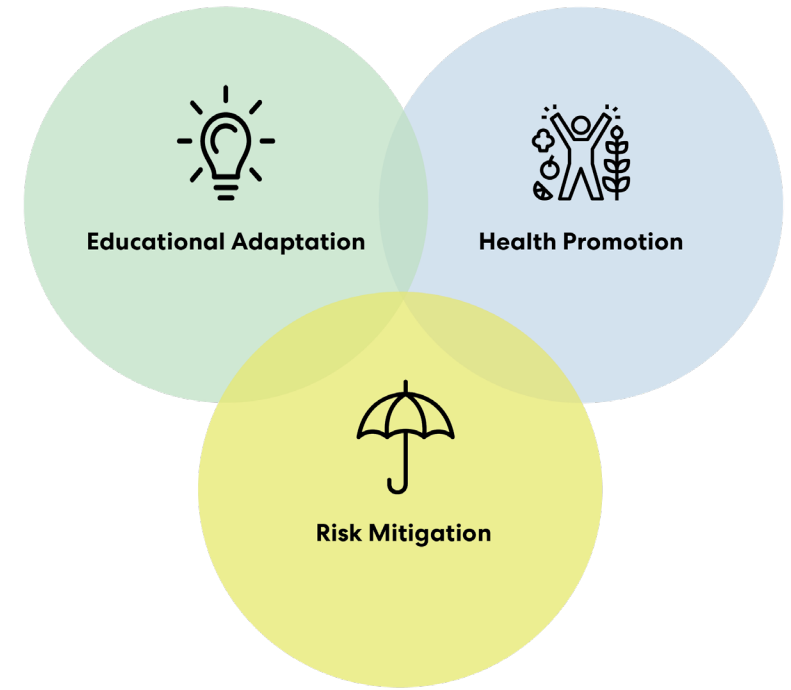


Potential



Efficacy

# Navigating unprecedented change requires holistic thinking.



## Educational Adaptation

Strategies that support flexibility in behavior, logistics, and technology during shifting teaching needs.

## Health Promotion

Strategies that promote physical and mental health, social cohesion, and a sense of belonging and safety.

## Risk Mitigation

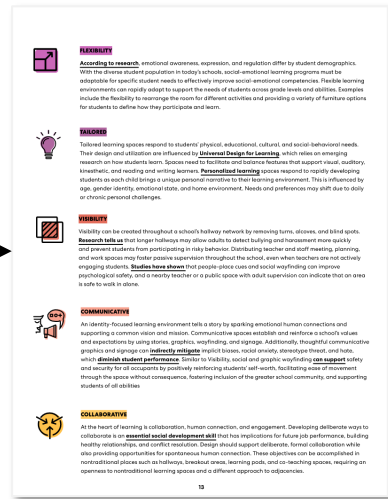
Strategies for reducing adverse environmental exposures that influence school occupant health and performance.



# Healthy Schools by Design



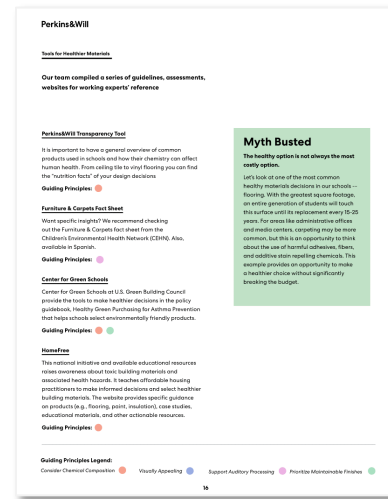
White Paper



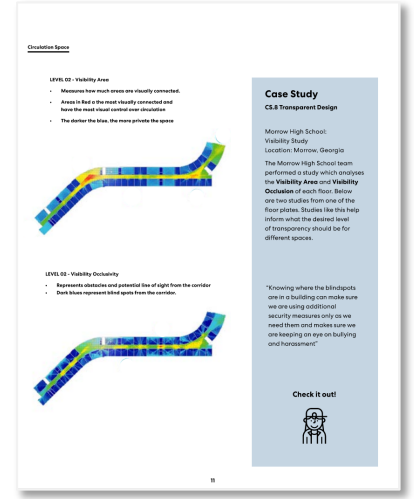
Literature Review

STRATEGY	CATEGORY	NEW/EXISTING	IN YOUR SCHOOL?
C1 Zone classrooms to include quiet areas or zones (book, pink, work) to include work and target spaces for collaboration and group learning.	Health Promotion Educational Adaptation	New Construction Existing Building	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable
C2 Include large and small collaborative areas (open) to encourage that create opportunities for connections between classes for community building.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable
C3 Increase ability for using transparent windows including energy glazing and solutions to improve learning and enhance collaboration.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable
C4 Increase quality of learning methods by offering teachers and students flexibility by including features such as group desks, movable furniture, dual entrance walls (vertical/horizontal), and modular walls that create variety of usable space.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable
C5 Provide classroom technology to increase student learning opportunities 30-degree corners, interactive, multi-task and portable screens, and amplified sound systems so students can participate in lessons in entirety.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable
C6 Extend technology and internet to allow for maximum flexibility including outdoor learning spaces.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable
C7 Provide desks, storage cubbies, or lockers with charging ports to include wireless tablets, instructional technology increases the need for power for each device.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable
C8 Provide flexible, mobile, in-class storage to reduce physical and visual clutter increase ease of learning and personalize.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable
C9 Provide alternative furniture (such as adjustable height desks, and moving chairs/benches). Benches also supports work in general activity and provides for elementary students when a variety of tables are present.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable
C10 Collaborate and strategically located every-daying graphics and signage to encourage, activated learning environment.	Health Promotion Educational Adaptation	New Construction Existing Building	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable

Strategies Checklist



Tools & Resources

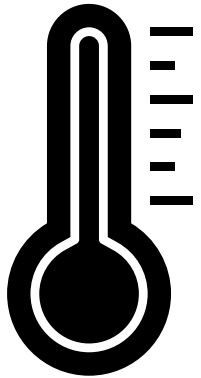


Case Studies & Design Hypotheses



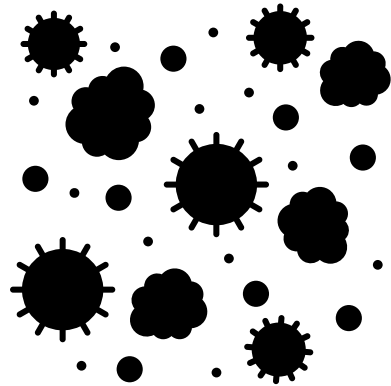
Occupationally optimized for ~4 million teachers

# How do we support **healthy workplaces?**



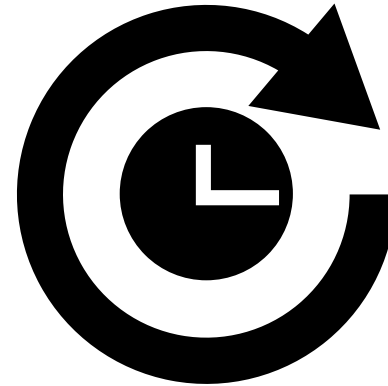
## Physiology

77% of public school teachers are female



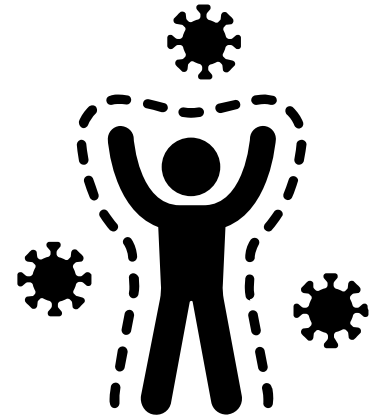
## Tenure

~14 years of experience & working ~53 hours a week



## Ergonomics

Repetitive work, long periods of standing & frequent lifting

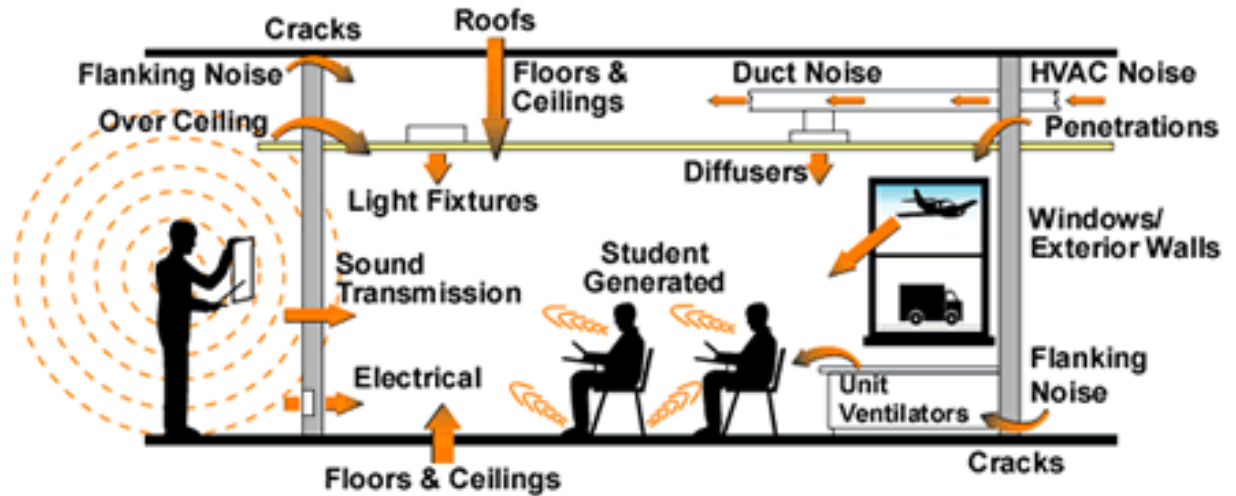


## Demographics

>25% of teachers are over 50 years old

Noise: Do we need to celebrate using our teacher's voice?

# State of Our Teachers



Women have smaller larynxes, or voice boxes, and their vocal cords vibrate more quickly (Long, 2016)

Music teachers are 8x more likely to have voice related problems compared to the general public (Morrow & Connor, 2011)

~600,000 U.S. teachers miss at least one day of work per year because of voice problems. Teacher voice injury costs the economy \$2.5 billion per year (ASA, 2016)

Classroom amplification technology has been shown to reduce vocal strain-related teacher absenteeism for over 15 years

**“The evidence is clear. No matter how good the curriculum, the teachers or administrators, we can’t achieve world-class education with crumbling school facilities.”**

Mary Filardo, 2021 State of Our Schools

# Designing for Teachers

*3 Takeaways*



**1. You must provide an ecosystem of spaces to support diverse individuals**



“Teachers hate giving up their own personal space & desk”

**COLLABORATE**  
DEVELOPMENT







Failure to help the gifted child is a...  
How can we measure the sonata...  
They are the difference between what we...

**RESPITE/ SOCIAL/ DECOMPRESS**  
VARIABILITY | INCLUSION





**PERSONAL SPACE**  
SAFETY | INCLUSION | COMFORT





# **SMALL GROUP FOCUS**

VISUAL & ACOUSTIC PRIVACY | SCHEDULED





#1

PUBLIC UNIVERSITY  
"BEST BANG FOR  
YOUR BUCK." ★

#10 BEST SCHOOL  
OF EDUCATION

#3 BEST  
PUBLIC COLLEGE  
VALUE

#3  
PUBLIC  
UNIVERSITY  
IN THE NATION



#1 EDUCATION  
EXPERIENCE,  
DARDEN SCHOOL  
OF BUSINESS

#9 BEST SCHOOL  
OF LAW

\*VIRGINIA

UVA TODAY SERIES

SPLENTIC  
MAME  
GASLIGHTS

STATE

FAMILY

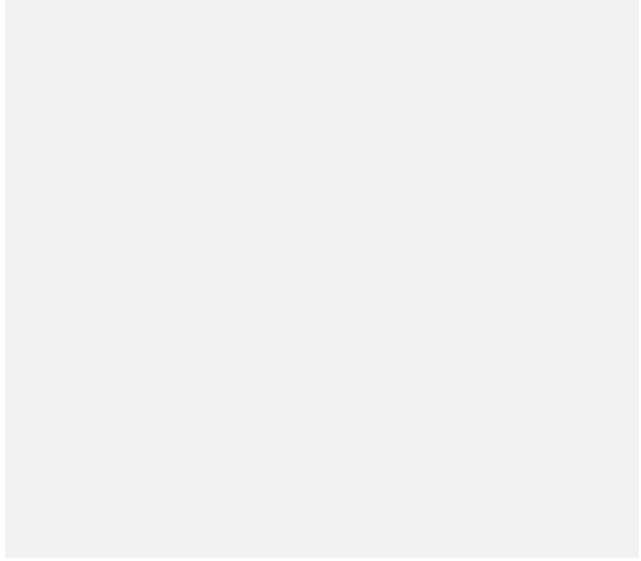
DESIGN THINKING



All you want to know?

**COLLABORATION**  
DAYLIGHT | ACTIVE | VIEWS





**2. Unlock co-benefits in every design decision to promote teacher health**



**Aesthetically integrated**

**Integrate technology**

**Remove chemicals of concern**

**Easy to clean**

**Easy to move reduce strain**

**Promotes light reflectance**

**Every design decision can improve teacher experience**

Case study: Desk Selection

**Perkins&Will**





**3. Go beyond the status quo to reinforce teacher health priorities**



**Ask the deeper questions.  
Teachers will be biased  
what they do not have.**

- Technology & Power
- Storage & Visual Clutter



**It is our job to inspire,  
educate, and enlighten  
teachers.**

## A multi-pronged approach

# Creating redundancy to support healthy workplaces

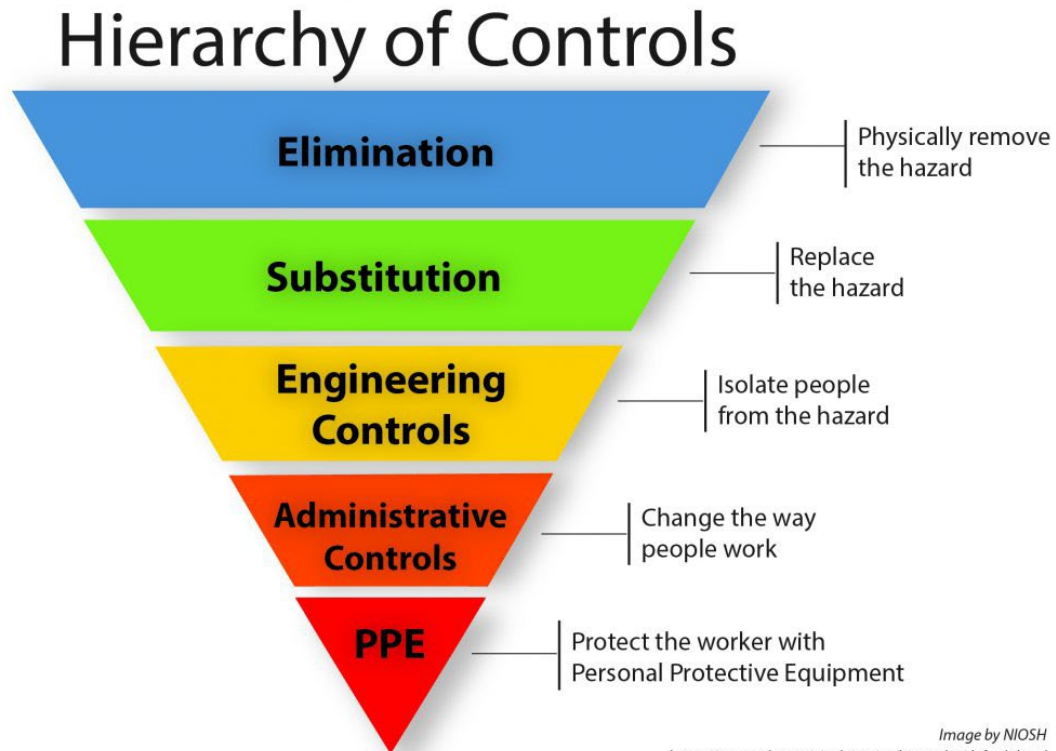


Image by NIOSH  
<https://www.cdc.gov/niosh/topics/hierarchy/default.html>

### Thermal Comfort

- Building Orientation
- Presence of AC
- Temperature Controllability
- Shades

### Acoustics

- Change layout/ dimensions of classroom
- Reduce background noise from HVAC & Outdoors
- Voice enhancement





**...BUT TENSIONS PERSISTS  
TO PROMOTE HOLISTIC  
TEACHER HEALTH**

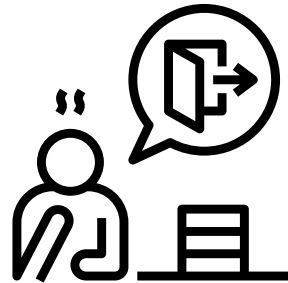


# What's Missing?

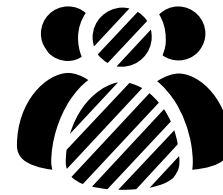
# State of Our Teachers



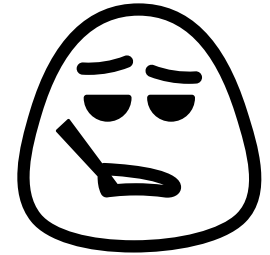
K-12 teachers are twice as likely to experience depression and high levels of job-related stress as the general population.



Educators report mental health symptoms as reasons for leaving the field.



62% of Black teachers and 59% of Latine teachers said they planned to leave education sooner than expected, compared to 55% of teachers overall



Schools continue to be ill-equipped to provide adequate well-being support for educators, especially educators of color.

# Our Mission

We are a nonprofit dedicated to helping schools integrate anti-racist mental health and well-being practices to improve retention for teachers, especially teachers of color.

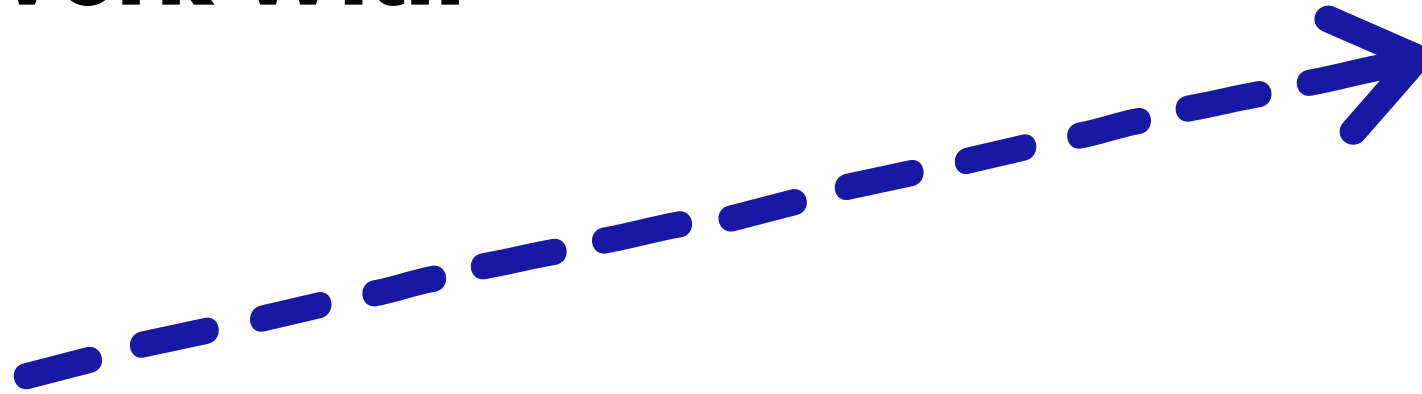
We use evidence-based approaches that are tailored and culturally relevant through healing circles, trainings, and strategic planning so that teachers can thrive, grow, and support every student.



Healing  
Schools  
Project

Reaching more educators. Reaching more schools.

# Who We Work With



**2020-21 SY**

**0 partnerships**

**50 educators**

**2021-22 SY**

**4 clients**

**160 educators**

**2022-23 SY**

**11 clients**

**1200+ educators**

Where we work



TEACHFORAMERICA

New Jersey



**PORTLAND**  
**PUBLIC SCHOOLS**  
prepared & empowered



**BUFFALO STATE**  
The State University of New York



Department of  
Education



# Centering Our Design on the Most Marginalized

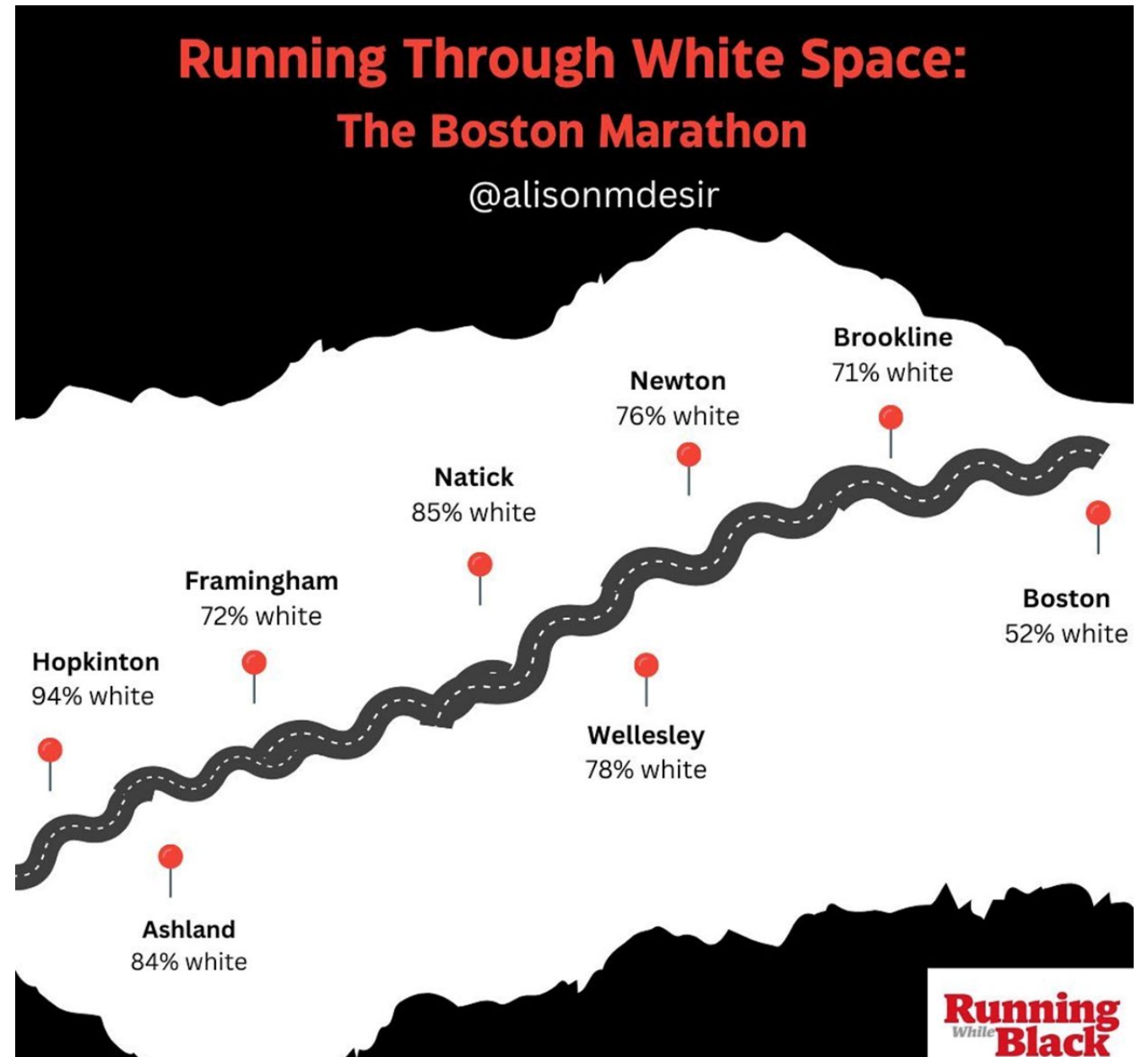


The Curb Cut Effect



# Centering Our Design on the Most Marginalized

Psychological Safety for Black People at the Boston Marathon



Tailored for Success

# Our approach



Healing  
Schools  
Project

**We design by centering  
educators of color in our  
work**



**The result: A solution that  
works well for teachers of  
all backgrounds**



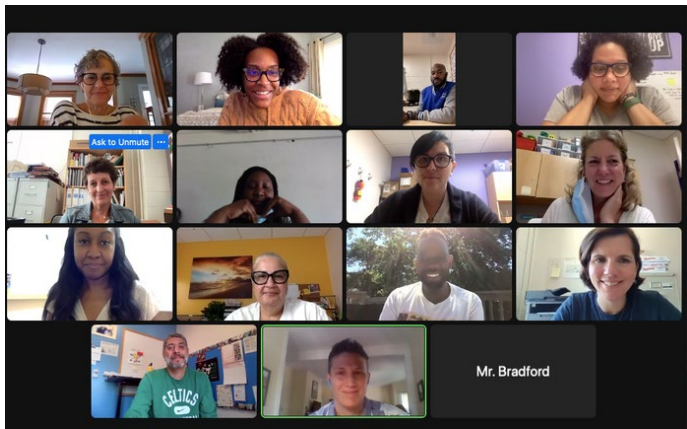
# Our Three-Pronged Approach



**1** Healing Circles

**2** Trainings

**3** School Leader Strategic Planning



# **Community Circle**

*Designing for Belonging*

**How do you know you belong  
in a space?**

**What does it feel like when  
you belong?**

**How can we incorporate the  
voices of the most  
marginalized in our work?**



# Case Study:



- Middle School in Newark, NJ
- About 300 students and 36 educators
- Participated in four healing circles, two community care workshops, and coaching and advising with their administrative team over the 2021-22 SY



# Case Study:



Using RAND Job Related Stress Survey as a Benchmark

# 77%

agreed or strongly agreed with the statement: "If I had concerns about my school, I would feel comfortable raising them with administrators at the school."

compared to 66% in RAND study!



**78%**  
**reported that if  
the school did  
more work like  
this, more teachers  
would be willing to  
stay.**

**Showing efficacy for teacher retention  
already!**





# Case Study:



We created a better community and improved working conditions

**89%**

reported their view of the  
importance of community  
care increased

**74%**

reported they felt more  
connected to their colleagues

# Thank You

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