

***QUALITY OF EDUCATIONAL  
ENVIRONMENTS  
WHY IT MATTERS***

# WHY IT MATTERS ~ QUALITY OF EDUCATIONAL ENVIRONMENTS

COLLABORATION SPACES



ADAPTABLE & RECONFIGURABLE



SPATIAL QUALITY + TECHNOLOGY



OWNERSHIP & PERSONALIZATION



SOCIAL ENRICHMENT



NATURE, INQUIRY & STEWARDSHIP



PLACEMAKING



WHOLE CHILD WELLNESS



## Why It Matters ~

On average, children spend...

**7 m** IN UNSTRUCTURED  
**7 hr** PLAY OUTDOORS  
IN FRONT OF  
A SCREEN

Child Mind Institute <https://childmind.org/article/why-kids-need-to-spend-time-in-nature/>

**90%**  
OF THEIR TIME INDOORS

EPA <https://www.epa.gov/iaq-schools/what-you-can-do-improve-academic-performance>

THE PHYSICAL ENVIRONMENT IMPACTS  
STUDENT LEARNING PROGRESS BY

**25%**

Building and Environment Journal  
<https://www.sciencedirect.com/science/article/abs/pii/S0360132312002582>

# WHY IT MATTERS ~ QUALITY OF EDUCATIONAL ENVIRONMENTS



Tecton  
ARCHITECTS



Suffield Middle School



## Collaboration Areas & Circulation Zones~

Daylight...

STUDENTS IN CLASSROOMS  
WITH MORE NATURAL  
DAYLIGHT PROGRESSED...

# 20% + 26%

FASTER ON MATH TESTS

FASTER ON READING TESTS

EPA <https://www.epa.gov/iaq-schools/indoor-air-quality-high-performance-schools#how>

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## Typical Classrooms ~

Flexible space, adaptable & reconfigurable furniture...

WITH SOFT SEATING,  
FLEXIBLE SEATING,  
SEATING CHOICE...

# 5%

BETTER GRADUATION RATE  
THAN THE STATE

# 8%

REDUCTION IN  
DROPOUT RATE

# 10Y

OUTPERFORMED THE STATE IN  
MATH, SCIENCE & READING

Albemarle County Public Schools <https://www.edutopia.org/practice/flexible-classrooms-providing-learning-environment-kids-need>; AND; <https://www.youtube.com/watch?v=4cscJcRKYxA>

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## STEM Classrooms ~

Fully Integrated Technology  
and what it supports...

# 2/3

WANT TO DO ENGINEERING

STARTING AT  
AGE

# 9-15

THEY ARE FASCINATED BY  
SCIENCE

# ~\$100K

GREEN SCHOOL SAVINGS ANNUALLY  
(BUYS 200 NEW COMPUTERS)



Suffield Middle School

**Personalization ~**  
Student Work, Neighborhoods,  
& Wayfinding...

# “Do I Belong?”

The Greater Good Science Center at the University of California, Berkeley  
[https://greatergood.berkeley.edu/article/item/how\\_to\\_help\\_students\\_feel\\_a\\_sense\\_of\\_belonging\\_during\\_the\\_pandemic](https://greatergood.berkeley.edu/article/item/how_to_help_students_feel_a_sense_of_belonging_during_the_pandemic)

THE ANSWER IS LINKED TO  
WHETHER STUDENTS SUCCEED  
& THRIVE SOCIALLY, EARN  
HIGHER GRADES AND OPT  
INTO AND SUCCEED IN MORE  
DIFFICULT COURSES

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McAlister Intermediate School

## Nature & Outdoor Learning ~

Nature, natural sounds, natural materials and natural patterns...

REDUCES STRESS LEVELS IN JUST  
**20s**

VIEWS TO NATURE FOR  
**40s**  
LED TO FEWER MISTAKES ON FOCUSED TASKS

  
HAPPINESS & PRO-SOCIAL BEHAVIOR

Welcome to Your World by Sarah Williams Goldhagen

APA <https://www.apa.org/monitor/2020/04/nurtured-nature>

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HAPPINESS & PRO-SOCIAL BEHAVIOR





Harvard Schools for Health <https://schools.forhealth.org/>

## Whole Child Wellness~

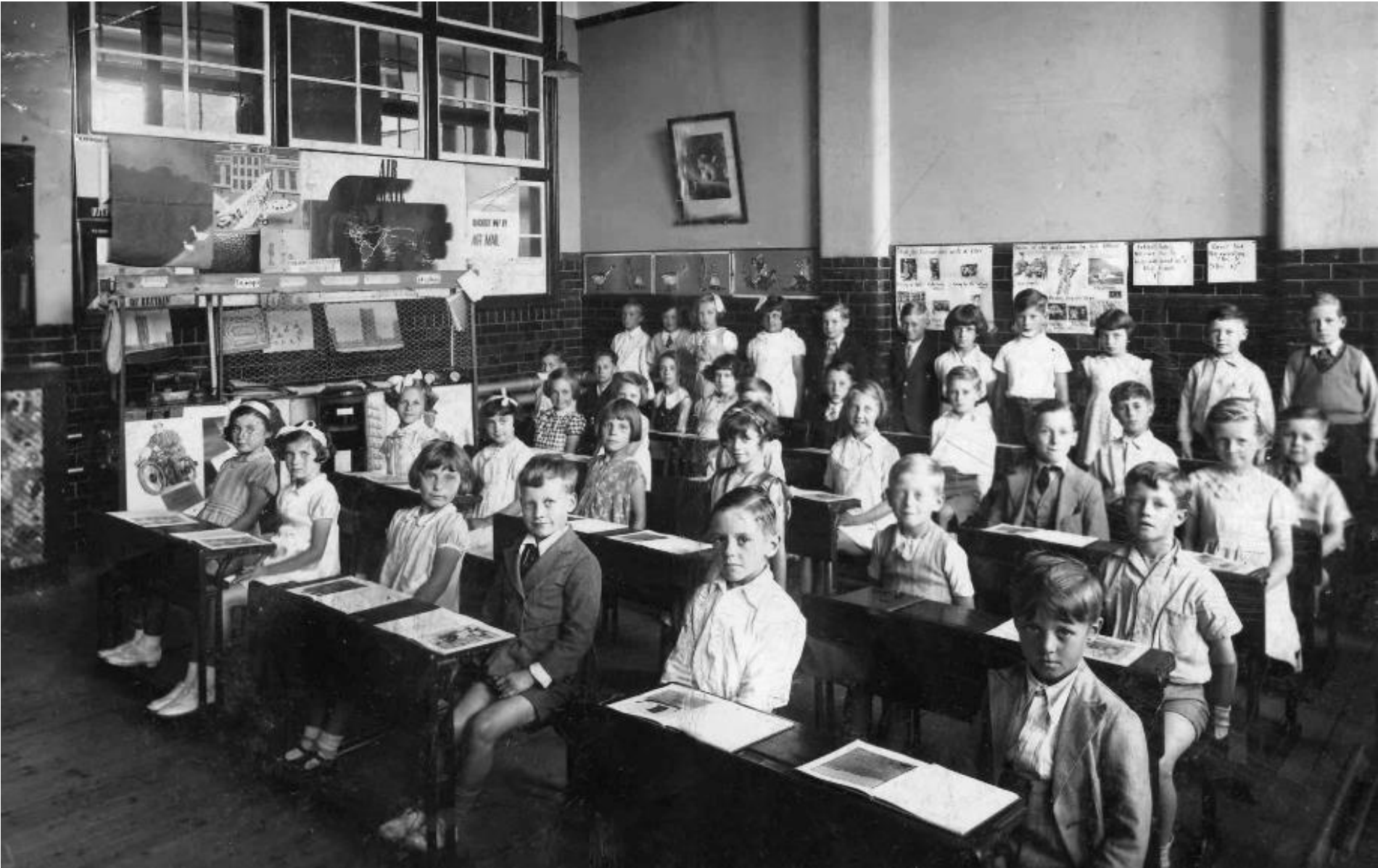
WELL is for people...

# BUILDING COMPONENTS

AND THEIR  
EFFECTS  
ON

# HUMAN HEALTH

# 21<sup>ST</sup> CENTURY LEARNING / THEN AND NOW



# 21<sup>ST</sup> CENTURY LEARNING ENVIRONMENTS



# 21<sup>ST</sup> CENTURY LEARNING / OUTDOOR ACTIVITY ZONES



PRECEDENT EXAMPLE



PRECEDENT EXAMPLE



PRECEDENT EXAMPLE

# 21<sup>ST</sup> CENTURY LEARNING / DAYLIGHTING



# 21<sup>ST</sup> CENTURY LEARNING / FLEXIBLE ASSEMBLY SPACES

PRECEDENT EXAMPLE



PRECEDENT EXAMPLE

# 21<sup>ST</sup> CENTURY LEARNING / DAYLIGHTING



A blue-tinted photograph of a park. In the foreground, there is a wooden gazebo with a decorative roof and a wooden bench. In the background, there is a large American flag on a tall pole, a large tree, and a white building with dark shutters. The scene is set in a grassy area with some bushes in the foreground.

***LOOKING PAST WHAT IS IN  
FRONT OF YOU***



# TRANSFORMING SPACES / CREC DISCOVERY ACADEMY- BEFORE



PRECEDENT EXAMPLE

# TRANSFORMING SPACES / CREC DISCOVERY ACADEMY- AFTER







# TRANSFORMING SPACES / WILLIAM J. JOHNSTON MIDDLE SCHOOL - BEFORE



# TRANSFORMING SPACES / WILLIAM J. JOHNSTON MIDDLE SCHOOL - AFTER



# TRANSFORMING SPACES / WILLIAM J. JOHNSTON MIDDLE SCHOOL - BEFORE



# TRANSFORMING SPACES / WILLIAM J. JOHNSTON MIDDLE SCHOOL - AFTER





# TRANSFORMING SPACES / ASNUNTUCK COMMUNITY COLLEGE - BEFORE



# TRANSFORMING SPACES / ASNUNTUCK COMMUNITY COLLEGE - AFTER



# TRANSFORMING SPACES / TRINITY COLLEGE – VERNON SOCIAL CENTER - BEFORE



# TRANSFORMING SPACES / TRINITY COLLEGE – VERNON SOCIAL CENTER - AFTER



# TRANSFORMING SPACES / NORWICH FREE ACADEMY - BEFORE



SLATER MEMORIAL, NORWICH, CONN.



# TRANSFORMING SPACES / NORWICH FREE ACADEMY - AFTER

