The WELL Building Standard: Evolution of Next Generation Design
ANY GIVEN WEEKDAY...
WHO GOT UP EARLY TO EXERCISE?
• Less than 5% of adults participate in 30 minutes of physical activity each day.

• 20% of adults get the recommended amount of exercise each week.

• Inactivity is linked to one in ten deaths worldwide.
HOW DID YOU GET TO WORK?
• 68% of commuter travel up to 15 miles to get to work

• 75% of all commuters drive alone

• Daily commutes raise your blood sugar, cholesterol, anxiety, blood pressure, and risk of depression

How did you get to work?
DID YOU HAVE A CAFFEINE FIX?
IS THIS WHERE YOU WORK?
BRING YOUR LUNCH- $2.00 +/-
CALORIES: 435
SATURATED FAT: 4 G
SODIUM: 1,085 MG
SUGARS: 17 G

WHAT’S FOR LUNCH?
BIG MAC MEAL - $6.17
CALORIES: 990
SATURATED FAT: 10G
SODIUM: 2,600 MG
SUGARS: 51 G

WHAT’S FOR LUNCH?
IT'S 2:00 PM...

SITTING IS STILL THE NEW SMOKING

HOW LONG HAVE YOU BEEN SITTING?
IT’S 2:00 PM...

WHEN WAS THE LAST TIME YOU LOOKED OR WENT OUTSIDE?
IT’S 2:00 PM...

WHO’S READY FOR NAP?
SYMPTOMS
• FREQUENT YAWNING
• CHANGES IN VISION
• MOODINESS
• FALLING ASLEEP AT YOUR DESK
• HEADACHE OR STOMACHACHE
• CRAVING FOR CARBOHYDRATES

CAUSES
• GETTING TO LITTLE SLEEP
• POOR EATING HABITS
• HIGH LEVELS OF STRESS
• METABOLIC DISORDERS

WHO'S READY FOR NAP?
IT’S 2:00 PM...

OR ANOTHER CAFFEINE FIX?
TIME TO HEAD HOME...
WHAT’S FOR DINNER?
WHAT'S FOR DINNER?
WHAT’S AFTER DINNER?
WHO IS KEEPING UP?
SUSTAINABILITY EVOLUTION
OUTDOOR

INDOORS

ALL AROUND

TRANSPARENCY EVOLUTION
The Evolution of Ergonomics in School Chairs

Doghouse Diaries "Where it's lunchtime, all the time."

FURNITURE EVOLUTION
FURNITURE EVOLUTION
SPACE EVOLUTION
WHAT...

Is the WELL building standard?
WELL is...

a holistic approach to address the built environment’s impact on the human body.

Its mission is to improve human health and well-being through the built environment.
THREE levels of certification

Measures, certifies, and monitors building features that impact health and well-being.

Certification Process:
Registration Certification
Documentation Recertification
Performance Verification
Performance Verification Guidebook

provides a step-by-step guide to completing the on-site testing and assessments required for certification.

In evaluating adherence to the WELL Building Standard™ (WELL), a project’s assessor will **grade each concept independently** on a numerical scale. The final WELL Score is calculated based on the total Preconditions and Optimizations achieved across the board. **Failure to achieve any Precondition** in any concept will preclude the award of WELL Certification.
"health is primarily a measure of each person’s ability to do and become what he wants to become”

-Rene Dubos
90%

We Spend almost 90% of our Time Indoors

Exposing us to pollutant levels 2 to 5 times higher occasionally up to 100 times higher than outside
Seven Concepts of WELL

- MIND
- COMFORT
- FITNESS
- LIGHT
- NOURISHMENT
- WATER
- AIR
mind

Optimize cognitive and emotional health through design, technology and treatment strategies.
comfort

Settle into a distraction-free, productive and comfortable indoor environment. WELL considers thermal, acoustic, ergonomic and olfactory comfort to optimize indoor working environments.
fitness

Keep moving by integrating exercise and fitness into everyday life. Provide opportunities for an active lifestyle and discourage sedentary behaviors.
Benefit from daylight and lighting systems designed to increase alertness, enhance experience and promote sleep.
nourishment

Limit the presence of unhealthy ingredients and encourage fresh and wholesome foods supporting mindful eating habits.
water

Promote high quality water and improved accessibility through the implementation of proper filtration techniques and regular testing.
Breathe easy with optimal air quality and reduce or minimize the sources of indoor air pollution.
We are a **Function and Creation** of Our Built Environments

And **Our Environment** is Changing How We Live, Work, Play
Over **55 MILLION SQ. FEET** of Registered WELL Projects in All Sectors of Architecture

Retail  | Government

Residential  | Education

Commercial  | Healthcare
How...

Can We Implement WELL into K12 Environments?
1st Project in the World to Simultaneously Achieve LEED Platinum, SITES Four-Star Certification, The Living Building Challenge, Designed to be Net-Zero Energy and Water and is the First WELL Platinum Building
80% Daylight Autonomy and Passive Solar Controls
Operable windows controlled by a Building Automation System
Direct Access to Nature
Fitness Circulation through Movement of Space – Multi-Level
Individualized Thermal Control
Atrium is not Mechanically Heated nor Cooled
High Performance Insulation and Low-E Windows
Material Transparency - All Materials Were Vetted to Eliminate Material Components that Negatively Impact Environment or People

97% of Construction Waste was Diverted From Landfills

T-5 Fluorescent Lighting Equipped with Daylight Sensors, Controls, Dimming Ballasts are Engaged When Natural is Insufficient

Lagoon Replicates Natural Water Treatment Process

Water is Processed to Tertiary Non-Potable Standards
Green Roof With Variety of Plants Selected for Their Medicinal, Culinary and Biofuel Uses
Clean Air Plants at All Workstations – Remove Pollutants
Olfactory Comfort – Separation of Strong Odors
Biophilic Art on Every Floor of Building
Monitors at Each Workstation, Quarterly Comfort Surveys, Monthly Occupant Meetings Ensure Occupants are Comfortable

All Storm and Sanitary Water is Collected, Treated, and Reused On-Site

Rain Gardens, Pervious Asphalt and a Green Roof Prevent Run-Off

Building Produces More Energy Than it Consumes

3-Star Green Restaurant Certified Eating Establishment – Focus on Organic and Local Produce
Photovoltaic Solar Panels Generate Enough Electricity for Energy
Vertical Axis Wind Turbine
Geo-Thermal Wells Capture Heating and Cooling Energy
Demand Control Ventilation (DCV) - Indoor Air Quality is Monitors Temperature, Humidity, CO2, TVOC, Particulates and CO
Underfloor Air Distribution Allows Cool Air at Human Level Warm Air to Rise
How do we **LEARN** and **APPLY** to a K12 Environment
TIME FOR IMPLEMENTATION BY YOU!!!
Instructions:

- Get Into 6 Small Groups
- 3 Minutes
- Write Ideas Under Each of the Seven Concepts
- Need Extra Space Write on Back of Paper

Goal: To write as Many Changes to This K12 Classroom Cluster You Can Think of to Make This Building WELL.

READY......SET......GO!
Seven Concepts of WELL

Typical K12 Building Wing
Everyone is a Winner for Thinking WELL.....

STUDENTS and STAFF say THANK YOU!!!
WHY THIS MATTERS?
83% said new space has created a positive impact on their health and well-being.

92% said the new space has a positive impact on their business performance.

94% said that they are able to more easily collaborate with others.

66% appropriate comfort level increases productivity.

10% appropriate comfort level increases productivity.

13% natural elements within the workplace increase well-being.

50% decreased risk of low productivity.

Why this matters?
INCREASED PRODUCTIVITY
INCREASED EMPLOYEE RETENTION
INCREASED MEMBER SATISFACTION
DECREASED OVERHEAD EXPENSES
DECREASED EMPLOYEE SICK LEAVE
DECREASED EMPLOYEE HEALTH CARE COSTS
MORE POSITIVE WORK ENVIRONMENT

WHY THIS MATTERS?
<table>
<thead>
<tr>
<th>BEST EDUCATION SYSTEMS</th>
<th>HEALTHIEST COUNTRIES</th>
<th>GREENEST COUNTRIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SOUTH KOREA</td>
<td>1. ICELAND</td>
<td>1. FINLAND</td>
</tr>
<tr>
<td>2. JAPAN</td>
<td>2. SINGAPORE</td>
<td>2. ICELAND</td>
</tr>
<tr>
<td>3. SINGAPORE</td>
<td>3. SWEDEN</td>
<td>3. SWEDEN</td>
</tr>
<tr>
<td>4. HONG KONG</td>
<td>4. ANDORRA</td>
<td>4. DENMARK</td>
</tr>
<tr>
<td>5. FINLAND</td>
<td>5. UNITED KINGDOM</td>
<td>5. SLOVENIA</td>
</tr>
<tr>
<td>6. UNITED KINGDOM</td>
<td>6. FINLAND</td>
<td>6. SPAIN</td>
</tr>
<tr>
<td>7. CANADA</td>
<td>7. SPAIN</td>
<td>7. PORTUGAL</td>
</tr>
<tr>
<td>8. NETHERLANDS</td>
<td>8. NETHERLANDS</td>
<td>8. ESTONIA</td>
</tr>
<tr>
<td>9. IRELAND</td>
<td>9. CANADA</td>
<td>9. MALTA</td>
</tr>
<tr>
<td>10. POLAND</td>
<td>10. AUSTRALIA</td>
<td>10. FRANCE</td>
</tr>
<tr>
<td>14. UNITED STATES</td>
<td>28. UNITED STATES</td>
<td>26. UNITED STATES</td>
</tr>
</tbody>
</table>

**According to UN’s Social Progress Imperative, March 7, 2017**

**According to UN’s Global Burden of Disease, Sept 21, 2016**

**Yale Study, Jan. 25, 2016**

**WHY THIS MATTERS?**
THANK YOU.
for thinking WELL