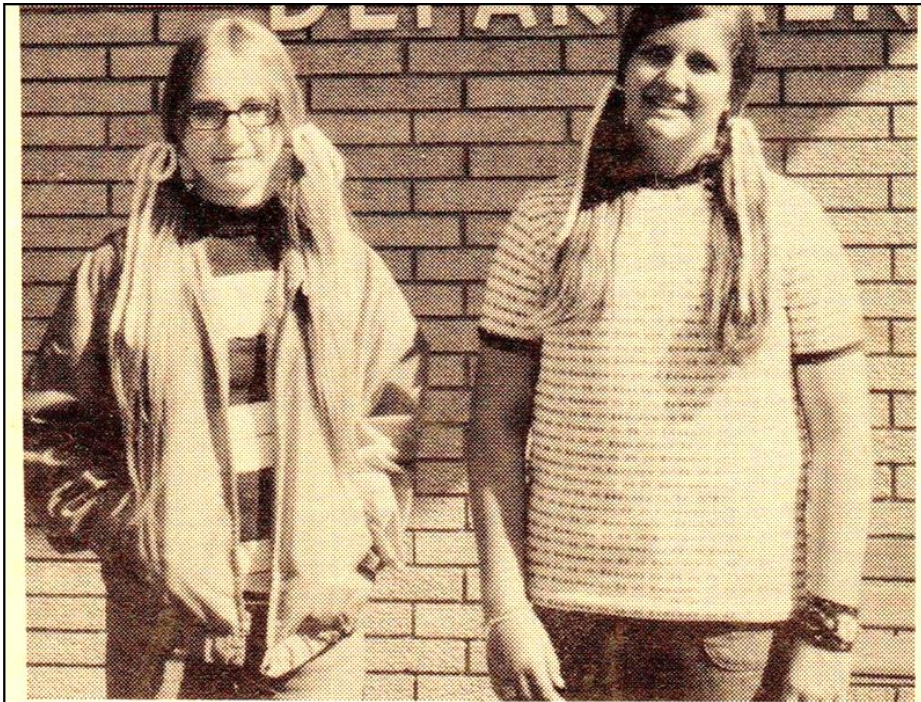


Applying the Wellness Principles of The WELL Building Standard to Residential Interiors



Design Impacts Lives

How that happens is up to us



Walk for Ecology A Double Success

Thirty-five hikers walked and picked up trash from and at \$300. At 10 a.m., the students and

Saving the Planet

a lifelong quest
or an abstract
concept?

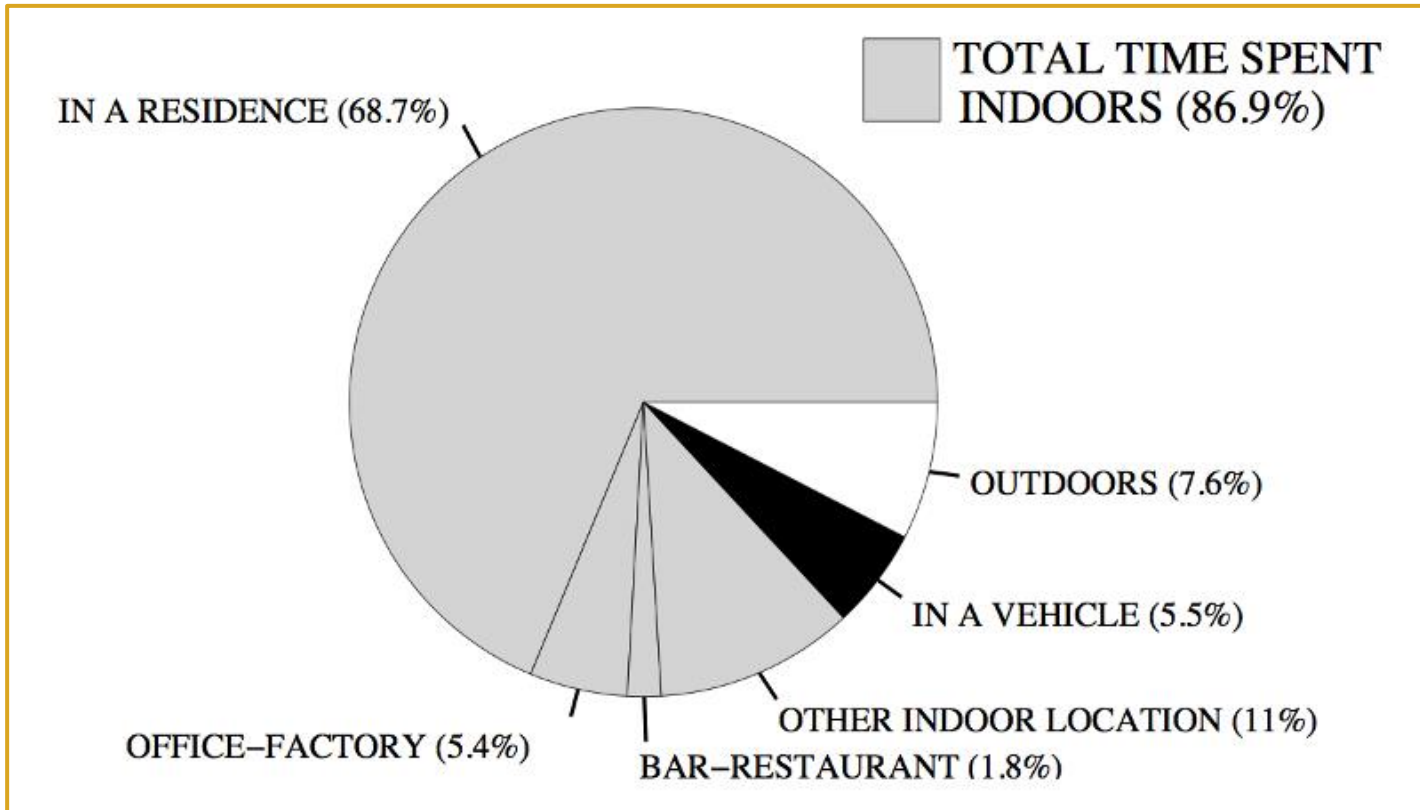
People are likely to care most
about what directly and immediately
impacts their lives

Demand for Healthy Homes is UP
and they are Premium-Worthy

10% +

Wellness is
physical, mental and emotional health

The quality of our surroundings
influences our physical, mental, and
emotional health – for good or bad



54 minutes of every hour INDOORS!

ASID / IWBI Partnership 2017



The WELL Building Standard



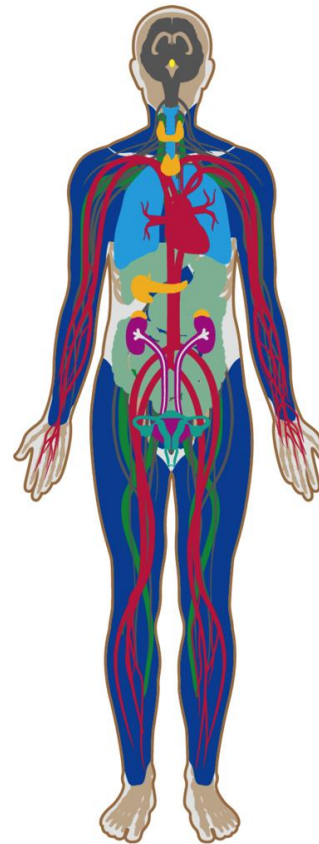
Performance-based system for measuring, certifying, and monitoring features of the built environment that impact human health and well-being

Evidence-based medical and scientific research connects buildings to the health and wellness of their occupants

WELL Building Standard Features: Water Concept						
Feature	Project Typology			Verification Documentation		
	Core and Shell	New and Existing Interiors	New and Existing Buildings	Letter of Assurance	Annotated Documents	On-Site Checks
30, Fundamental Water Quality						
Part 1: Sediment	P	P	P			Performance Test
Part 2: Microorganisms	P	P	P			Performance Test
31, Inorganic Contaminants						
Part 1: Dissolved Metals	P	P	P			Performance Test
32, Organic Contaminants						
Part 1: Organic Pollutants	P	P	P			Performance Test
33, Agricultural Contaminants						
Part 1: Herbicides and Pesticides	P	P	P			Performance Test
Part 2: Fertilizers	P	P	P			Performance Test
34, Public Water Additives						
Part 1: Disinfectants	P	P	P			Performance Test
Part 2: Disinfectant By-products	P	P	P			Performance Test
Part 3: Fluoride	P	P	P			Performance Test
35, Periodic Water Quality Testing						
Part 1: Quarterly Testing	–	O	O		Operations Schedule	
Part 2: Water Data Record Keeping and Response	–	O	O		Operations Schedule	
36, Water Treatment						
Part 1: Organic Chemical Removal	O	O	O	MEP		Spot Check
Part 2: Sediment Filter	O	O	O	MEP		Spot Check
Part 3: Microbial Elimination	O	O	O	MEP		Spot Check
Part 4: Water Quality Maintenance	O	O	O		Operations Schedule	
Part 5: Legionella Control	O	O	O		Professional Narrative	
37, Drinking Water Promotion						
Part 1: Drinking Water Taste Properties	O	O	O			Performance Test
Part 2: Drinking Water Access	–	O	O	Architect		Spot Check
Part 3: Water Dispenser Maintenance	–	O	O		Operations Schedule	

Body Systems Applied to WELL Features

A simple way to express the built environment's
complex impact on the human body



Cardiovascular

Digestive

Endocrine

Immune

Integumentary

Muscular

Nervous

Reproductive

Respiratory

Skeletal

Urinary

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What LEED is to Buildings WELL is to People



Outcomes are no less relevant

Air
Water
Nourishment
Light
Fitness
Comfort
Mind

Air

WBS: Specific goals for air quality
smoking / ventilation / VOCs / materials safety /
moisture & humidity control / purification /
operable windows / pest control / cleaning

Air

Increase fresh air supply, control temp and humidity,
purify indoor air, reduce exposure to toxins

Air

Bringing It Home

Air Filters & Purifiers

Humidifiers & Dehumidifiers

Operable Windows

Non-Toxic Materials

Green Cleaning

Monitoring



Water

WBS: Specific goals for water quality & accessibility
organic & inorganic contaminants / water
additives / water treatment / filtration methods /
drinking water promotion

Water

Ensure access to clean water and encourage sufficient water consumption

Water

Bringing It Home

Home Testing Kits

Water Filters & Purifiers

Filtered Water Supply at Sinks and Fridge

Carbonators



Nourishment

WBS: Specific goals for addressing healthful food choices / food allergies & contaminants / nutritional info / labeling & advertising / responsible production / safe prep & storage / serving sizes / mindful eating

Nourishment

Access to healthful foods & beverages, informed nutritional choices, avoidance of allergens and pathogens

Nourishment

Bringing It Home

Refrigeration & Storage

Food Prep Areas & Surfaces

Dishware & Glassware

Cookware



Light

WBS: Specific goals for lighting design / circadian lighting / glare control / color quality / shading & dimming / right to light / windows

Light

The sun as a significant light source, balancing types and quality of light, the effect of lighting design on circadian rhythm

Light

Bringing It Home

Windows & Skylights

Interior & Exterior Window Treatments

Ambient & Task Lighting

Circadian Lighting

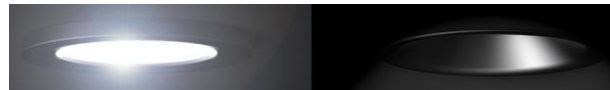


Image courtesy of HowToGeek.com

Fitness

WBS: Specific goals for interior fitness circulation /
activity incentives & opportunities / indoor &
outdoor activity spaces / active transportation /
fitness equipment / active furnishings

Fitness

Motivation and opportunity to be more active and discourage a sedentary lifestyle

Fitness

Bringing It Home

Fitness Rooms

Room Circulation

Stairs

Gardening

Monitoring



Comfort

WBS: Specific goals for accessible design / ergonomics / interior & exterior noise / thermal & olfactory comfort / sound reduction, masking & barriers

Comfort

Preventing stress through thermal, olfactory, and acoustic comfort

Comfort

Bringing It Home

Zone Heating & Cooling

Soft Surfaces & White Noise

Kitchen & Bath Ventilation

Universal Design



Mind

WBS: Specific goals for health & wellness awareness /
integrative design / beauty & design / biophilia /
adaptable spaces / healthy sleep & business travel /
family support / self-monitoring / material
transparency / organizational altruism & transparency

Mind

Foster mental and emotional health through support of sleep, downtime, family, and privacy needs, aesthetics, connection to nature, altruism and transparency

Mind

Bringing It Home

Multi-Use Spaces

Bedroom Design

Personalization / Art & Aesthetics

Biophilia
Natural Materials
Natural Light
Plants & Animals



Synergies

Plays WELL with others



7 Principles of Universal Design

Equitable Use / Flexible Use / Simple and
Intuitive / Perceptible Information /
Tolerance for Error / Low Physical Effort /
Size and Space for Approach and Use

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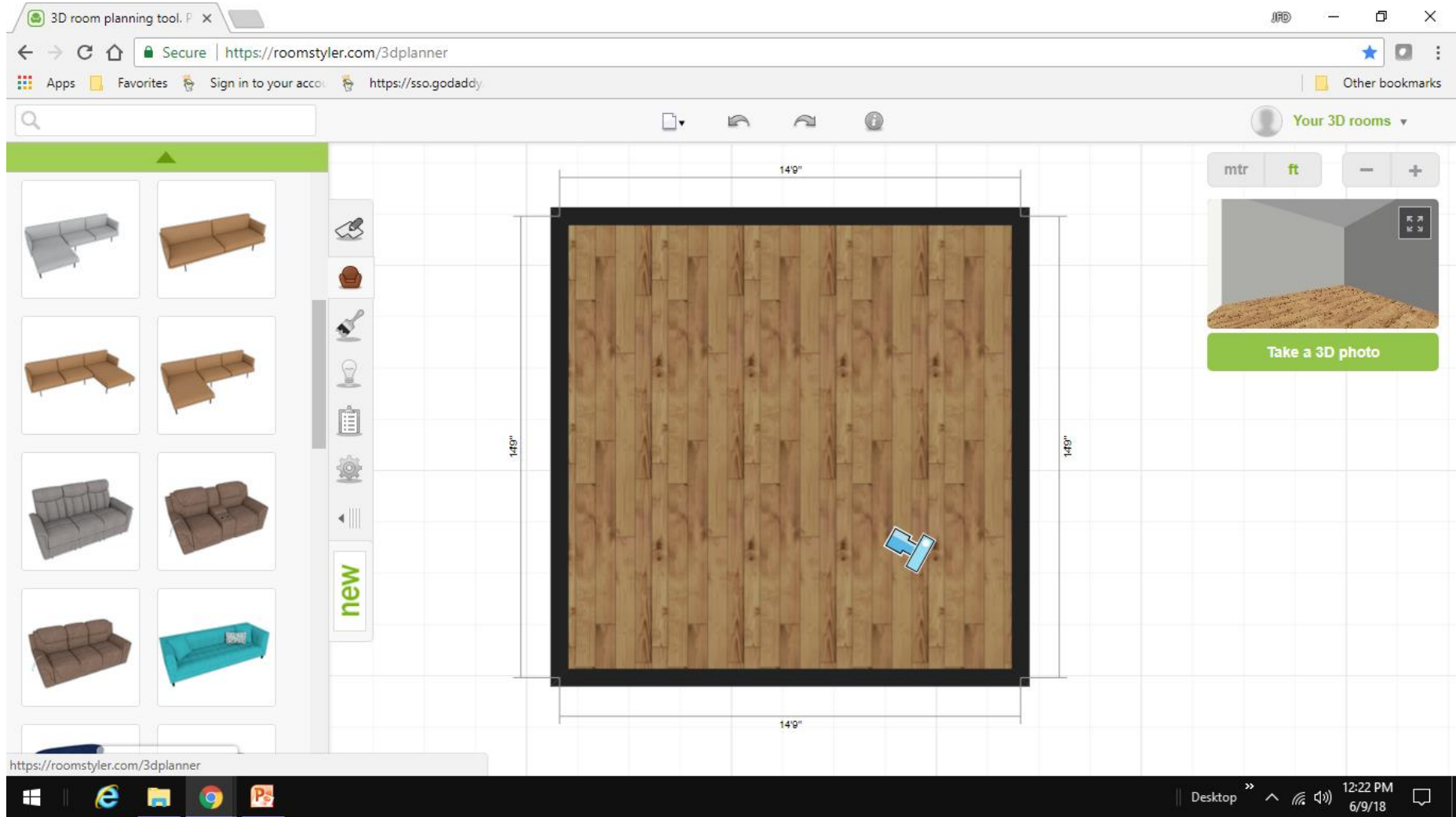
Creativity

Low-Risk Added Value

School Program: Designing for Wellness^{©2018}

May, 2018





RoomStyler.com



TEMPERATURE

indoor & outdoor

Differences between the temperature inside and outside can make it a challenge to keep it warm enough or cool enough in your room.

comfort

Being too warm or too cold can be uncomfortable and make it hard to concentrate or sleep.

preferences

Some science says that girls and boys like different temperatures. A room that's comfortable for boys to work and play in may be too cool for girls doing the same activities.

Discussion Questions

Would you rather be in a room that's too warm or one that's too cold? Why?

What could you do to make your space just right without using dangerous things like space heaters?



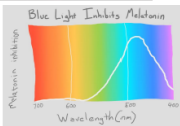
SLEEP

circadian rhythm

Circadian Rhythm is our internal clock that regulates feelings of sleepiness and wakefulness.

screens

Our circadian rhythm is sensitive to different colors of light. Electronic screens from TVs to cell phones give off blue light telling our internal clock it's time to wake up.



mood & concentration

When we don't get enough of the right kind of sleep, we can be moody or have trouble concentrating. Going to bed and waking up at the same time every day helps us to get enough of the right kind of sleep.



Discussion Questions

What things do you do during the day and at bedtime that may be affecting your sleep?

What could you change in your room to help you sleep better?



SMELLS

good & bad

Some scientists believe that humans can detect about a trillion different smells – good and bad. Smell has a powerful effect on how we react to our surroundings.

physical reactions

Though everyone reacts in their own way, certain smells can cause headaches or even eye and nose irritation.

concentration

Smells can affect concentration too. Think about how hard it is to focus when you can smell something delicious nearby – like chocolate or Flaming Hot Doritos.

Discussion Questions

Is there a smell that brings back a strong memory for you every time you smell it?

What are some ways you can keep smells you don't want out of your room?



NOISE

where it comes from

Bare walls and floors in your room can make it really noisy. Noises from outside, like traffic or airplanes, or your brother's or sister's loud friends can also get into your room and make it hard to concentrate.

hearing

Loud noise can affect your hearing now and in the future. Listening to really loud music – especially with headphones – or being around road construction or airports can all damage your ears.



WINDOWS

light

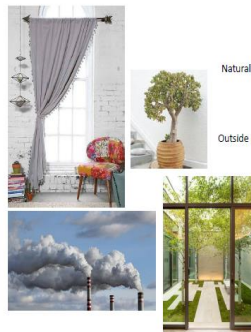
Natural light (sunlight) can have both positive and negative effects on us. Window light can be warming and cheerful or it can create glare that hurts our eyes.

air

Outside air can sometimes have fewer pollutants than air sealed up inside a building. Windows that open and close can bring in fresh air, or keep out humidity and pollutants.

biophilia

Biophilia is the need that we all are born with to connect with nature and other living things. Sunlight and fresh air help us make that connection to nature.



Discussion Questions

When would you want sunlight and fresh air in your room and when would it be better to keep them out?

What are some ways that windows can support biophilia?

COLOR

mood

Color can have a powerful effect on our moods. Reds can be energizing or angering, and blues can calm you or make you feel sad. We tend to surround ourselves with the colors that make us feel best.

temperature

There are warm colors and cool colors, and a room can feel either warm or cool depending on the colors in it. Red, yellow, and orange are considered warm colors, and blue, green, and purple are considered cool.

culture

Different colors can have very different cultural meanings. For example, in the United States brides traditionally wear white, but in many Asian countries, they wear red.



Discussion Questions

Why is your favorite color your favorite? Does it ever change?

What are some examples you can think of where color is used to express and support different cultures?

LIGHTING

energy use

Different kinds of lightbulbs work and use energy differently. The more efficiently a lightbulb works, the longer it lasts and the cheaper it is to use.

temperature

Because of the way they work, some lightbulbs can actually make a room warmer. They produce more heat than light, making them more like space heaters that you can read by.

color

Different light sources have different colors and can even make the colors in your room – like your furniture or clothes – look different.

Discussion Questions

Do you know how incandescent, fluorescent, and LED lightbulbs produce light and which ones use energy most efficiently?

How do you think the color of the light in your room can affect how you feel?



FURNITURE

ergonomics

Ergonomics has to do with how the human body works and interacts with objects. Ergonomic furniture helps people stay healthy and be productive.

posture & breathing

When you sit in an ergonomic chair, it's easier to keep from hunching over which makes it easier to breathe and digest lunch.

focus

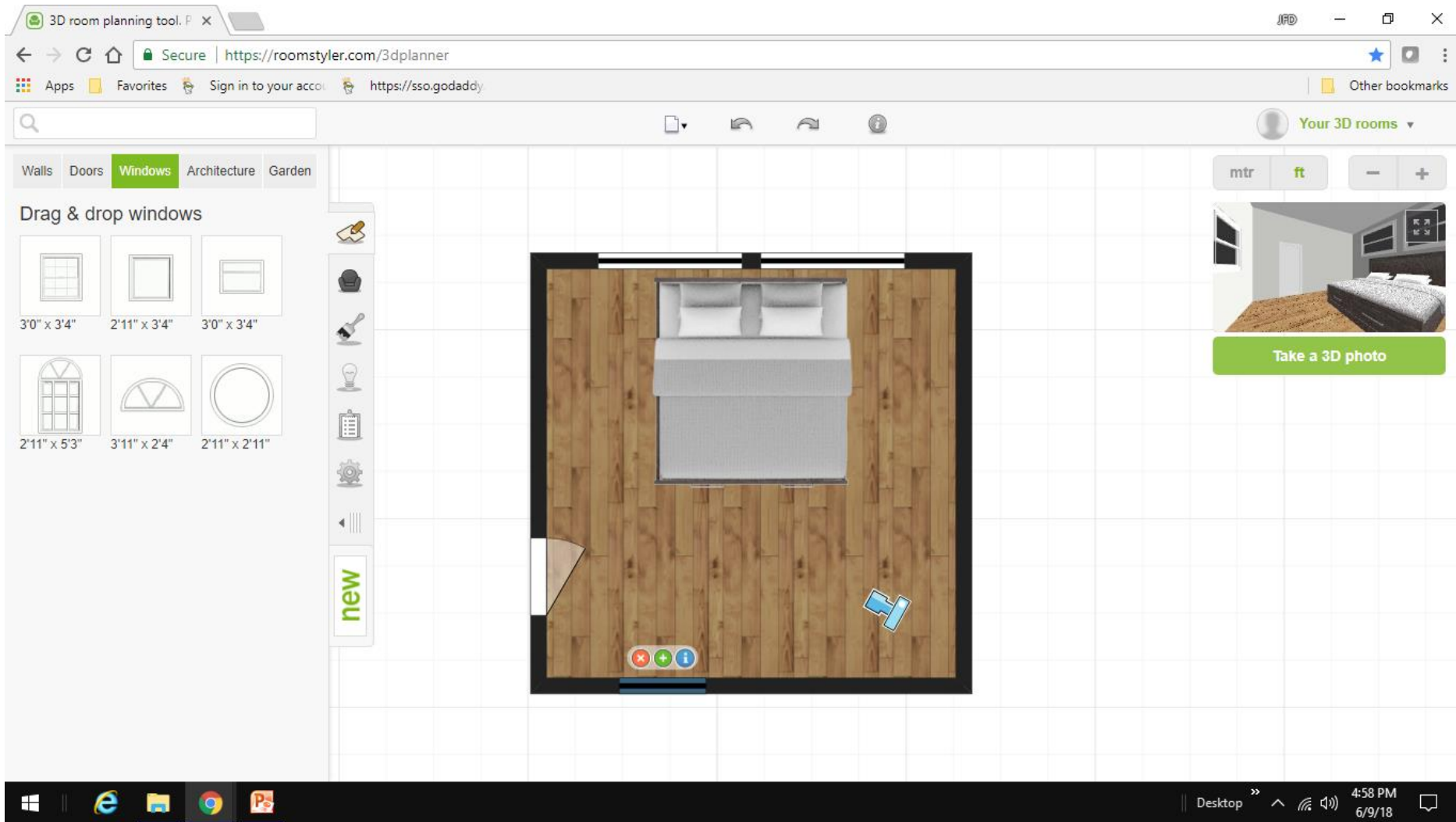
When you can breathe better and you're not all hunched over, it's easier to concentrate on whatever you're trying to figure out.

Discussion Questions

Is it sometimes easier to answer questions or solve problems when you're standing up? Why do you think that is?

What furniture would you change in your room or your classroom to make it more comfortable?





RoomStyler.com

Students embrace Biophilia



Students REALLY embrace Biophilia



Change what you can

And speaking of change . . .

WELL Building Standard Version 2

Air
Water
Nourishment
Light
Movement
Thermal Comfort
Sound
Materials
Mind
Community

International WELL Building Institute



wellcertified.com

The value of Designers is in their IDEAS

Lauren Rottet



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