



A Decade of Success for Energy Conservation through Behavior Change[®] at UMass Dartmouth

Behavior, Energy, and Climate Change Conference

Tuesday, November 14, 2023



UMass Dartmouth Performance Contract

UMass Dartmouth

- ▶ Deferred maintenance
- ▶ Limited available capital
- ▶ Aging infrastructure
- ▶ Energy intensive operations



Performance Contracting

- ▶ Financing mechanism
- ▶ Partnership with an energy service company
- ▶ Energy savings from facility improvements
- ▶ Decreased maintenance and operating costs
- ▶ Upgraded equipment and infrastructure



ENERGY CONSERVATION THROUGH BEHAVIOR CHANGE®

- ▶ Holistic initiative to partner with an energy project
- ▶ Created by an Industrial/Organizational Psychologist
- ▶ Scientifically-valid proprietary program
- ▶ “People-Side of Performance Contracting”

PROGRAM PROCESS

Human Behavior Energy AuditSM

- Establish human energy baseline
- Identify impactful Behaviors

Awareness Communication

- Necessary, but insufficient first step
- Engages entire community

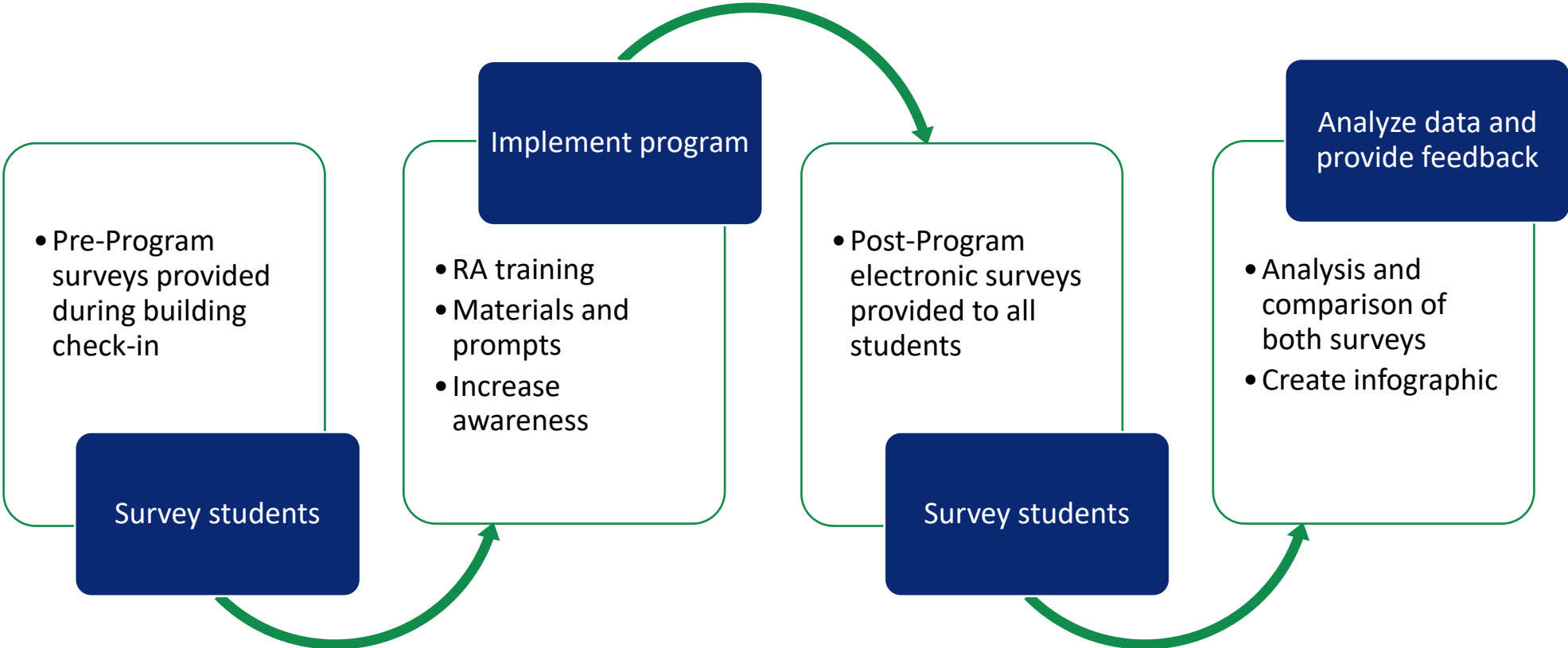
Sustainable Behavior Change

- Proven social-cognitive behavior change
- Increased organizational culture of energy conservation

Existing Program Alignment

- Integrates with current efforts
- Broadens and supports successful initiatives

ENERGY CONSERVATION THROUGH BEHAVIOR CHANGE®



Program Development and Evolution



SLASH SLASH LIMIT LIMIT REDUCE BE BOLD
THE TRASH THE TRASH MINUTE MINUTES YOUR YOUR THE JUICE BE BOLD
GO COLD GO COLD

Shower Prompts

DO YOUR PART
Adopt the following energy saving behaviors:

SLASH THE TRASH

WHAT YOU CAN RECYCLE ON CAMPUS:

- Glass
- Clean Paper
- Clean Cardboard
- Metal Containers
- Plastic Containers

REDUCE THE JUICE

CHANGES TO REDUCE ENERGY USE:

- Use chargeable devices (iPod)
- Unplug devices when not in use
- Use a power strip and turn it off
- Use shared appliances (Coffee pots)
- Dress in layers instead of using a fan or space heater

STRIVE FOR 5 MINUTES

STEPS TO A SHORTER SHOWER:

- Try This Order
Shampoo, Condition, Soap, Shave, Rinse.
- Use Less Water
Try turning off the water when you are not rinsing.
- Get Out Sooner
Don't spend extra time in the Shower.

BE BOLD & COLD

GREEN YOUR LAUNDRY ROUTINE:

- Don't overload
- Wash full loads
- Use cold water settings
- Hang or lay clothes out to dry
- Clean the dry filter after every load

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HEY CORSAIRS,
STRIVE FOR
5
MINUTE
SHOWERS

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WHILE IN THE SHOWER: LIMIT YOUR MINUTES

- 10% singing
- 5% washing
- 85% making life decisions

Just do the washing
(and maybe the singing)

Jump in, shower for three songs, then jump out

Use your phone to time your shower and start to Limit Your Minutes

Save ~1,059 six packs worth of water annually by reducing your showers by 1 minute

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LIMIT YOUR MINUTES

Data Collection and Distribution

2019 University of Massachusetts-Dartmouth

Please complete both sides of the survey and return to your RA

We are interested in your opinion regarding environmental aspects of residential life at UMassD. Please read each item carefully and consider the corresponding scale, then place a mark that most accurately reflects your opinion.

Please answer questions with respect to your opinions and behaviors while on campus and skip questions that do not apply to you or your living situation at UMassD.

Please indicate your level of agreement with each of the following statements regarding energy at UMassD.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Energy Conservation is important here at UMassD.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UMassD should conserve energy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I should help UMassD conserve energy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is my right to use as much energy as I want.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recycling is important here at UMassD.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My personal actions, in combination with others, have a significant impact on the environment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Did you know...?

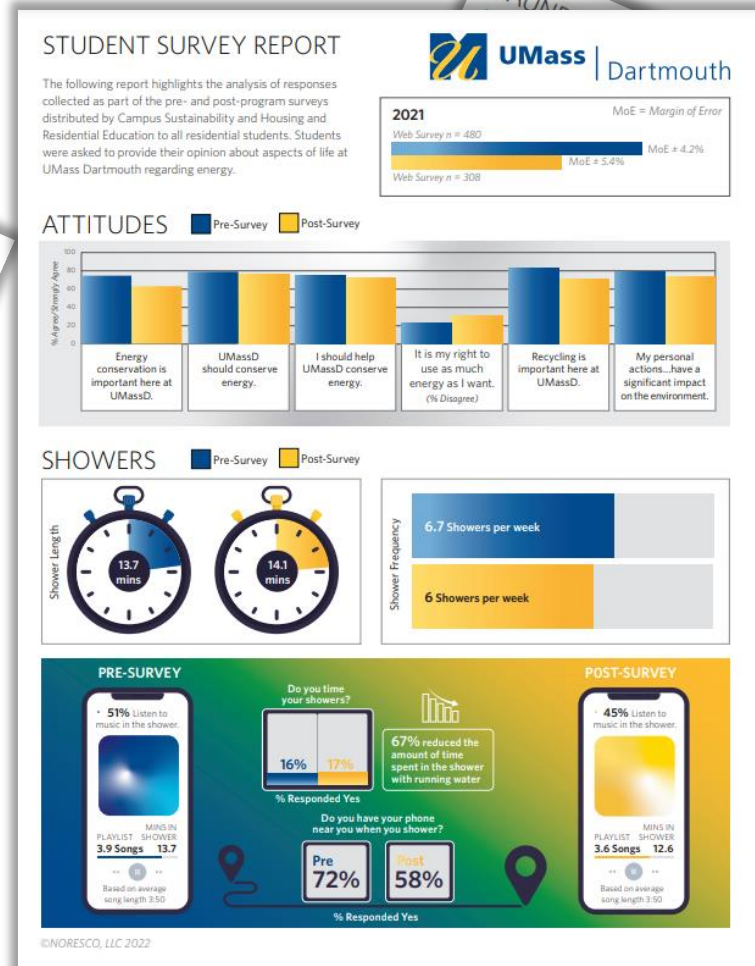
	Yes	No
Washing clothes in hot water uses more energy than washing them in cold water.	<input type="radio"/>	<input type="radio"/>
Many electronics consume energy while plugged in, even when not in use.	<input type="radio"/>	<input type="radio"/>
Leaving a fan on in an unoccupied room does not make it cooler because it just re-circulates the same air.	<input type="radio"/>	<input type="radio"/>
Over 75% of the waste stream is recyclable.	<input type="radio"/>	<input type="radio"/>
UMassD uses a single stream recycling program (paper, cardboard, plastic, metal, and glass in the same bin).	<input type="radio"/>	<input type="radio"/>
Over 24% of the waste stream is compostable.	<input type="radio"/>	<input type="radio"/>
UMassD has a collection process for uneaten food.	<input type="radio"/>	<input type="radio"/>
On average, each American throws away 1lb of food daily.	<input type="radio"/>	<input type="radio"/>
Your level of consumption impacts budgets and the UMassD community.	<input type="radio"/>	<input type="radio"/>

Please answer the following regarding your behaviors on campus.

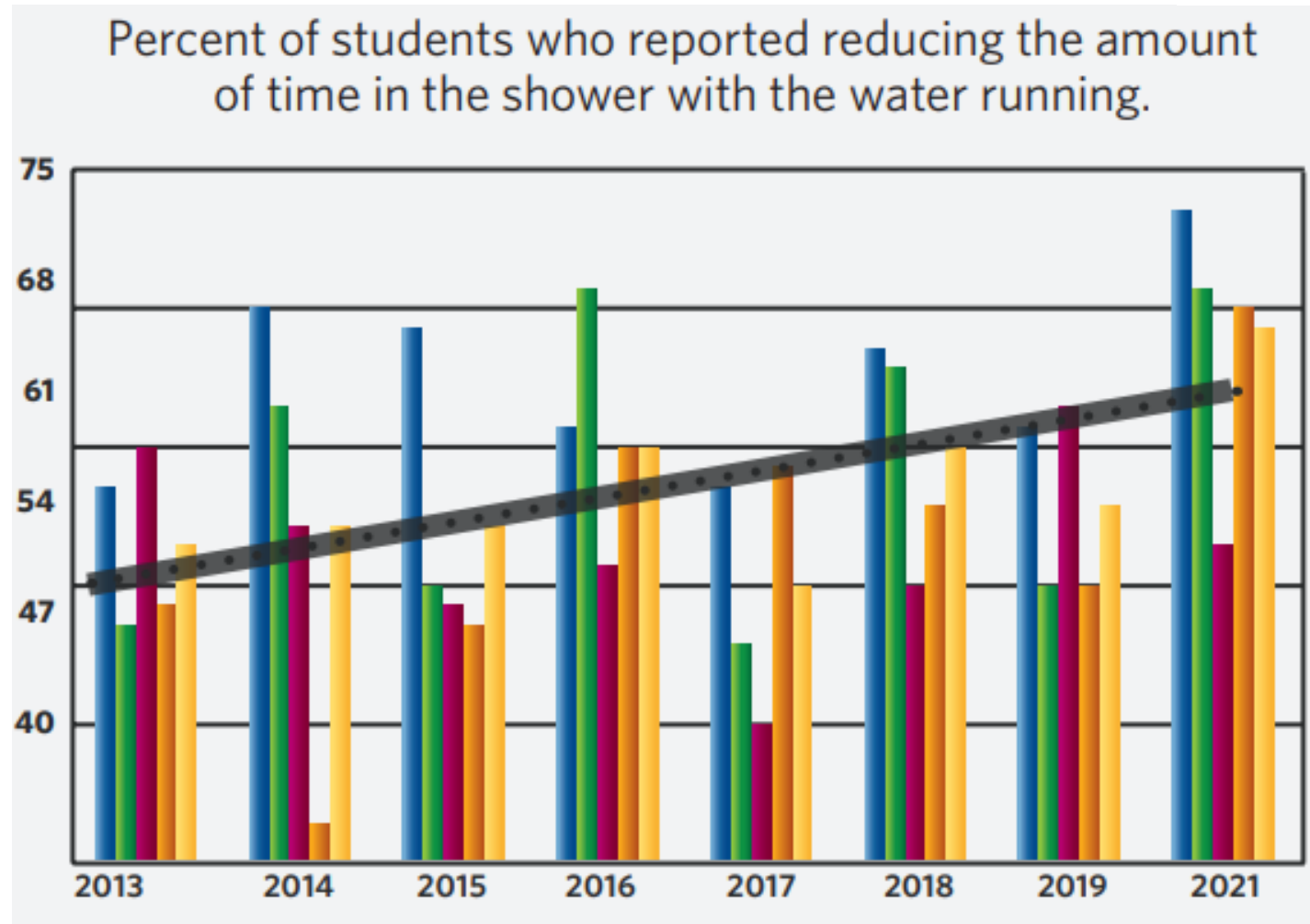
	Never	Seldom	Half the Time	Often	Always
When I leave my unoccupied bedroom, I turn off my fan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I turn off the water faucet while I am brushing my teeth.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I use a reusable water bottle.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am mindful to only take as much food as I will eat.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please answer the following regarding your recycling on campus.

	Never	Seldom	Half the Time	Often	Always
I recycle in my residence hall.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I recycle around campus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am mindful to place recyclable material in the appropriate bin.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bin placement and capacity is sufficient in my residence hall.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bin placement and capacity is sufficient around campus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
University staff properly process the recycling bins.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Longitudinal Data – Shower Behavior



Note: Shower Study conducted in 2015 with increased positive results in subsequent years



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