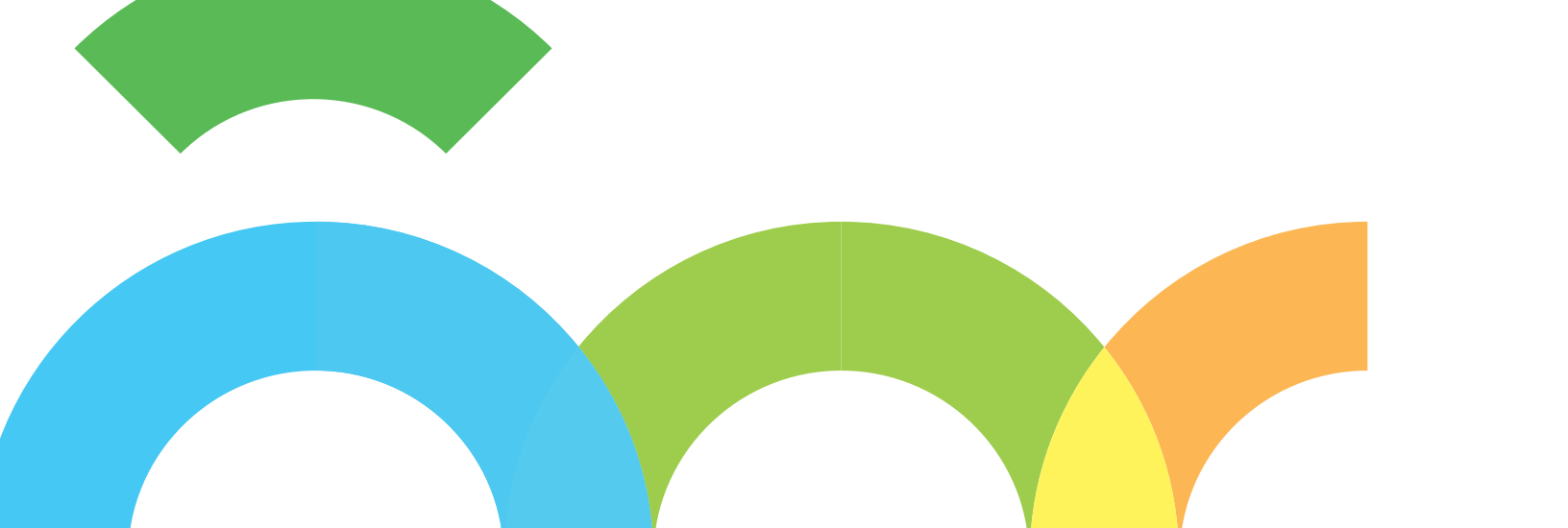




User experience assessment for sustainability at FSU

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Principles of User Experience Design
Fall 2022



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Introduction



Description and Design Challenge

Working with Residence Life and Campus Sustainability, utilize a user-centered design process in order to assess students' knowledge about sustainability in the residence halls. This project aims to change behaviors around water conservation, energy conservation, and recycling through designed materials—signage, stickers, social media graphics—with positive messaging.

Project Team

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Campus Sustainability Coordinator

Dr. Glenn Cochran

Associate Dean of Students, Student Life and Director
Residence Life and Housing

Design Team

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Student

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Student

Areas of Impact

Below are some of the areas we have defined as important to our assessment of sustainability in the Residence halls:

Recycling

- Using bins to sort either trash or recycling

Water conservation

- Turning off water when not in use
- Being mindful of shower times
- Laundry: making sure its a full load

Energy conservation

- Turning lights off when not using them
- Closing windows completely so the heat turns on (West)
- Closing windows when the heat is on
- Purchase the proper energy efficient appliances
- Unplug certain appliances when not in use
- Unplug chargers when not in use

User-Centered Research and Outcomes



Defining the Target Audience

People who use the resident halls

- Ecosystem of people living in or using residence halls:
- Students, local
- Students, international
- Year in school
- Various dorms
- Single or roommates
- People with disabilities
- (mobility differences, cognitive differences, hard-of-hearing)
- People who are Deaf
- Themed floors: fields of study, athletics, honors
- RA (resident advisors)
- Resident directors
- Friends or family visiting
- SDA (security desk attendant)
- People with service animals
- Community rooms, FSU club meetings
- Maintenance staff
- Campus tours
- Summer residents, not necessarily FSU students

What kinds of spaces or environments are in the residence halls?

- Kitchens
- Study/living areas
- Trash room
- Laundry room
- Bathrooms
- Bedrooms (suite with bathroom, suites with living room and bathroom, single rooms, double rooms, suites with living room and no bathroom)
- Offices
- Community / meeting rooms
- Game room, theater room, entertainment
- Desk at entry
- Vending machines
- Mailbox
- Maintenance areas
- Hallways
- Stairwells
- Elevators
- Lobby

Question Script for Survey

We wanted to understand resident students' attitudes and behaviors surrounding sustainability. We did this by using this set of seven questions and sending out surveys to resident students.

1. What does sustainability or “being green” mean to you?
2. Which one is true for you?
 - a) I frequently think about or practice sustainability
 - b) I sometimes think about or practice sustainability
 - c) I rarely think about or practice sustainability
 - d) I never think about or practice sustainability
3. Do you practice sustainability in the dorms? If so, do you have examples you can share? (If no...skip to next question.)
4. Do you think it's easy to practice sustainable living as a college student living in a residence hall? What challenges/difficulties do you face?
5. How confident are you that your peers are practicing sustainability?
6. Do you try to encourage others to be sustainable?
7. Why do you think some students are not more active in practicing sustainability in the dorms?

Survey

Sustainability in Residence Halls at FSU

We want to understand resident students' attitudes and behaviors surrounding sustainability. Please answer each of the **10 questions** honestly. Honest answers will help us the most. Answers will be anonymous.

Thank you for your input!
– Principles of UX Design Class

 leescrabbles23@gmail.com (not shared) [Switch account](#)



Which dorm do you live in?

Choose



What year are you?

Choose



What does sustainability or “being green” mean to you?

Your answer

Which one is true for you?

- ☐ I frequently think about or practice sustainability
- ☐ I sometimes think about or practice sustainability
- ☐ I rarely think about or practice sustainability
- ☐ I never think about or practice sustainability

Do you practice sustainability in the dorms? If so, do you have examples you can share?

Your answer

Do you think it's easy to practice sustainable living as a college student living in a residence hall? What challenges/difficulties do you face?

Your answer

How confident are you that your peers are practicing sustainability?

	1	2	3	4	5	
Not confident at all	☐	☐	☐	☐	☐	Very confident

Do you try to encourage others to be sustainable?

Your answer

Why do you think *some* students are not more active in practicing sustainability in the dorms?

Your answer

What could FSU do that would get students more interested in practicing sustainability?

Your answer

Survey Results

Focus group dorms:

- 1- sophomore towers
- 2- sophomore west
- 3- junior, miles bibb
- 4- senior miles bibb
- 5- freshmen, peirce
- 6- freshmen towers
- 7- sophomore larne
- 8- junior horace mann

What does sustainability or “being green” mean to you?

1. Recycling, Conserving water, not sure
2. Recycling, making sure lights are off, tidying up
3. I was looking up the definition, recycling, not having lights on all the time
4. Avoiding single use plastic, recycling, general stuff
5. Same thing, and not littering, actually throw stuff away
6. They said what I was thinking,
7. All of the above and also sometimes I'll have the window open and not the light because there is sunlight,
8. Being conscious of waste you are making

Which one is true for you?

- a) I frequently think about or practice sustainability
 - b) I sometimes think about or practice sustainability
 - c) I rarely think about or practice sustainability
 - d) I never think about or practice sustainability
- 1.b, 2.b, 3.a, 4.b, 5.b, 6.c, 7.b, 8.b

Do you practice sustainability in the dorms? If so, do you have examples you can share? (If no...skip to next question.)

1. Not really, I mean I don't know, the lights yeah
2. I do have a reusable water bottle, and I refill it at the stations
3. We make sure we separate our recycling, and that's it
4. Try to pick up and residue trash, take bottle caps and throw them out cause they can't be recycled
5. I was gonna say the same thing, like having recycling and trash separate
6. Um, I'd say like trying to limit how much stuff I use, like paper towels, just try to limit how much I use
7. I always use my reusable water bottle, and I take quick showers. And like I said, I'll sometimes have my window open for light
8. I do the same things, and when I wash my face I turn off the water in between doing stuff.

Do you think it's easy to practice sustainable living as a college student living in a residence hall? What challenges/difficulties do you face?

1. I mean it kinda depends, I think that people can be with reusable water bottle and the stations, but sometimes it's hard because we have to use a lot of water for the showers because it takes forever to get warm, we have to let it run for 10 minutes
2. Water pressure is terrible, so it takes a while to shower. Also if I'm washing dishes it takes longer, takes forever to fill my water bottle.
3. It depends on your schedule, if you have a busy schedule and you have to work a lot it's going to be hard to throw things away so you might forget about it. And the water pressure is bad in my dorm.
4. We have class full time, there's no recycling program or anything, we have to just dump our stuff into random bins and hope it's not full. The services at school use lots of single use items like Dunkin and the vending machines.
5. Depends on your schedule, if you're not in a rush or anything. Personally, if you just do things as you go it makes it easier. Luckily my water pressure isn't bad.
6. Same here. Just kind of depends on the day. Some days I'm good at it, others I'm too busy.
7. In Horace Mann, the showers are decent, but sometimes the temperature changes when someone flushes the toilet or turns on the sink. It's a pretty big temperature change so it makes it hard to find a balance. Also I feel like there aren't enough recycling bins. I see lots of trash cans so it makes me want to dump it all in there.
8. Recycling bins are smaller than the trash bins, so sometimes you have to choose but to put stuff in the trash. It's more convenient at home because you're not in a more temporary living situation like a dorm.

How confident are you that your peers are practicing sustainability?

1. Not really confident
2. I'd say the same thing
3. Absolutely not
4. It doesn't really matter. Leaving your electricity on isn't going to really make an impact. I just don't really care, cause they don't matter to me, I do it cause it makes me feel better.
5. I would say probably not confident at all cause I see more people not doing stuff, like just throwing recycling away. Like people don't even care about the smaller things
6. I'd be surprised if you told me they were being sustainable
7. Sustainability isn't the top thing on my mind, but like when there's a trash bin and recycling I separate it cause it's right there, but some people don't do that.
8. I don't think that many people on campus care that much because they have other priorities, so they're not thinking about it.

Do you try to encourage others to be sustainable?

1. Not really, I don't even know how, I do have a BRITA though and people use it
2. Somewhat, I have people use my BRITA
3. Depends on how bad it is. If the room is really messy I'm going to probably say something, but I just let them do their own thing, they're adults now so they should be able to figure it out.
4. Unless I see someone actively littering, I probably wouldn't do anything, one person's impact is not a lot, unless you're a billionaire
5. just my closest friends
6. I probably wouldn't say anything, you can make your own decisions
7. I won't chase after someone, I wouldn't say anything unless it was really bad
8. I feel like people either care or they don't, and if they don't they won't be perceptive to what you're saying.

Why do you think some students are not more active in practicing sustainability in the dorms?

1. Either they're not educated, or they have the mindset that it doesn't make a difference
2. A lot of selfishness, if it doesn't affect them they don't care
3. It depends what happens in your house, in my house my mom was always like crazy about the trash and recycling
4. I think it's just that people don't care about their impact, or because there's no reward or reason to be sustainable on campus. I don;t think it's people being intentionally bad, they just don't have time or a reason
5. I think it all comes down to education and the mindset. Some people don't know how to be sustainable and others just don't care
6. They don't care, and have no interest in caring, and don't know enough about it. Or they don't have the time
7. I think also people are too busy or tired to have it as a priority, especially as a college student
8. People get busy, and it's on of the things that just falls of the radar

User Experience Assessment for Sustainability at Framingham State University

Interviews Conducted: 33 Date: November 15, 2022



Scenarios

1. A student only has a vague idea about what sustainability is and how to practice it, so when making everyday decisions pertaining to sustainability, they don't know what to do and takes the easiest option such as throwing an item in the trash instead of recycling it because they don't know if it can be recycled or using disposable plastic water bottles instead of the water bottle refilling station in miles bibb because it is so slow as to be very inconvenient, and doesn't know of another way to avoid using plastic bottles.
2. A student wants to be more sustainable but frequently gets food at campus restaurants or the snack bar, which packages food in some recyclable, some not recyclable plastic. and there is no recycling bin in Sandellas if you choose to eat in.
 - a. A student wants to be more sustainable but uses meal swipes at Sandellas, which you are required to get certain items to use, such as for a drink: a water bottle, juice in a plastic bottle, or a soda can. It can be hard to be sustainable if you're required to get these items when you already are committed to using a reusable water bottle.
3. A student living in the dorm is actively trying to be more sustainable. They try to recycling and choose more sustainable / reusable options when possible. However, they begin to feel discouraged and frustrated when it comes to recycling in the dorm. They see the bins are always overflowing and students don't care to separate items, or try to limit their use of disposable items.
4. A student living in the dorm doesn't know much about sustainability. They will occasionally recycle plastic bottles, but for the most part does not think to separate items. They do not see other students making a change, so they don't think there is any reason for a change. They think they are just one person so that it doesn't matter and it won't change anything.
5. A student always takes very long showers. The water pressure in their dorm is low anyways, so it takes them a longer time to wash their hair. The water temperature also changes whenever another student uses the sink or flushes the toilet, so it takes even longer because they have to keep regulating the temperature. The student finds these things inconvenient, but they enjoy taking long showers anyway so they do not really see how much of an issue they really cause, and how much extra water they are wasting.

Design Deliverables



Design Principles

Changing culture together

Create a feeling of being part of a bigger community.

Encouragement

Uplifting messages promote growth and positivity.

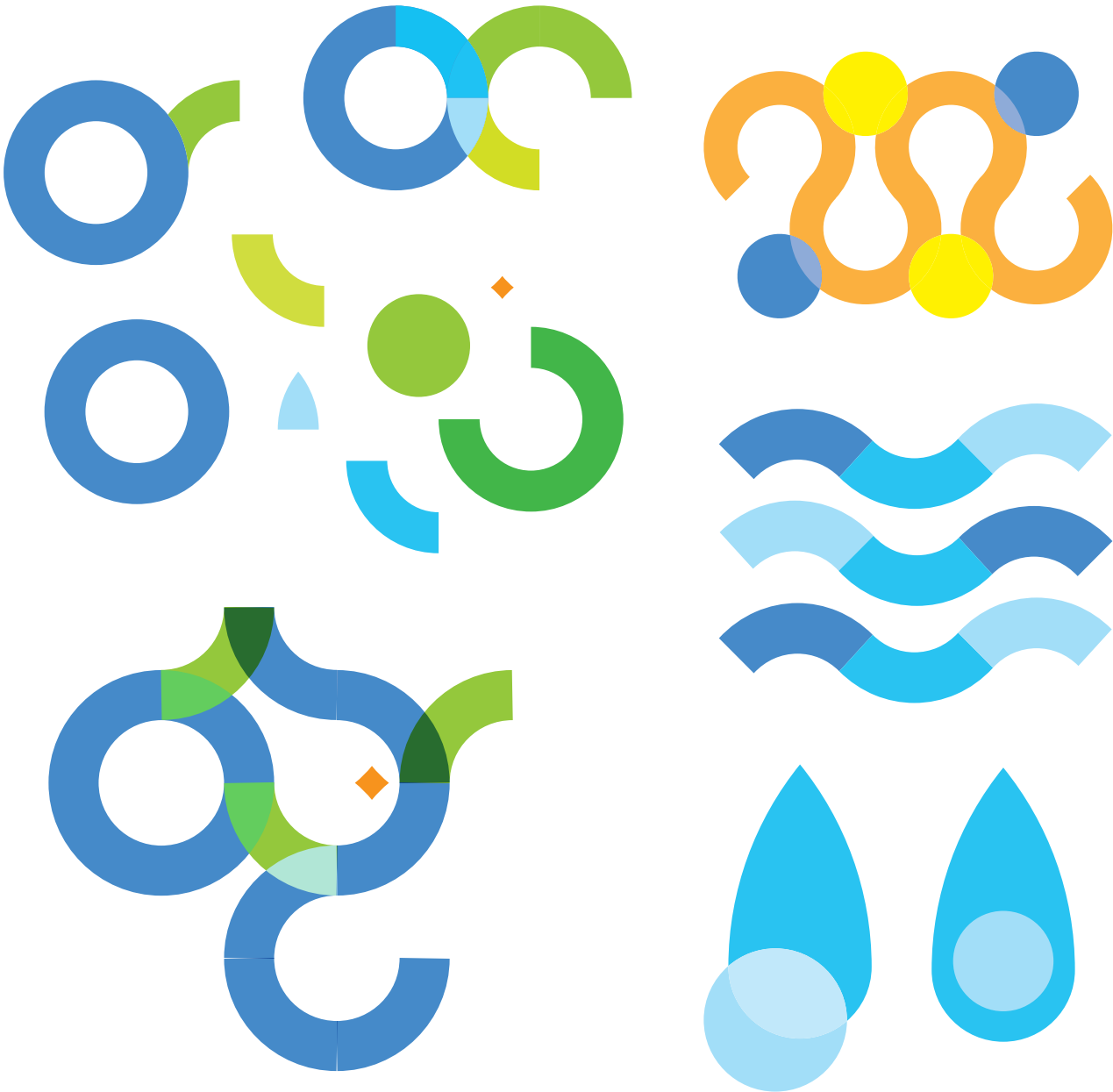
Education

Helping to educate about the big picture of sustainability. (“WHY”)

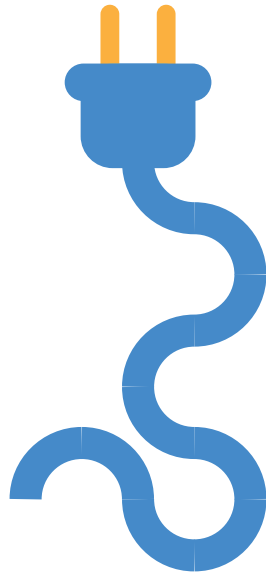
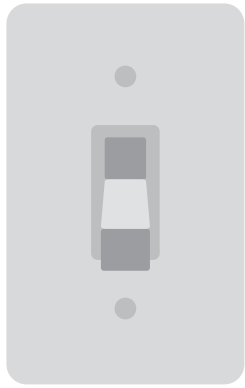
Make it personal

A student-centered point of view.

Visual Design Elements



Icons



Tip Sheet

living sustainably on campus

At FSU, we are working together to create a better environment on campus and to be mindful of our impact on the planet. Help us do our part as a community by following these sustainable living tips.

USE
natural
sunlight
before turning
on the lights

**Turn
OFF**



lights
when not in
your room.

**Don't leave
chargers
plugged in!**

Even if they're not charging your devices, they're still using energy!

Turn off and unplug your electronics when you're not using them.



**Keep windows
closed between
October 15–May 1**

Opening windows wastes energy and makes your room and surrounding rooms hotter.

Although electricity generation in Massachusetts uses natural gas, the cleanest of the fossil fuels, it is still a fossil fuel whose use and production has serious impacts on the environment.

You can help reduce those impacts by using less electricity!

Keep showers
under
10
minutes long.

Every **minute** of shower time uses **2 gallons** of water!

Only run the faucet when you need to.



Turn it off while you scrub your hands and brush your teeth.

Only use the washing machine if you have a full load of laundry to avoid wasting water. And wash laundry on cold to save energy!

Cut down on waste!

Recycle everything you can



Check the label on the item or its package to make sure it can be recycled. Clean out and rinse plastic and glass before recycling it.

Save paper!

Only print what you absolutely need to.



Avoid single-use plastic and paper

Use reusable water bottles, mugs, containers, and bags.

Recycling Signage + Social Media

Ram's guide to recycling

What you should recycle

Plastic

- Water / Beverage containers (#1)
- Milk / Juice jugs (#2)
- Health / Beauty containers (#3)

Needs to be rinsed



Check the number



Paper / Cardboard

- Newspaper
- Cardboard
- Paperback books
- Notebooks

Needs to be dry



No food / grease on items



Metals

- Cans / Foil
- Aluminum cans
- Aerosol cans (non-hazardous)

Aluminum cans are recycled



OUR
campus

does not recycle
glass to prevent
working hazards!

Do not recycle

- Plastic wrap
- Packing peanuts
- #6 Plastics
- Plastic bags
- Furniture
- Electronics
- Styrofoam / Foam
- Glass

Make sure these go in the trash

- Food Wrappers
- Paper Cups / Plates
- Plastic utensils
- Plastic straws
- Items with food residue / grease on them
- Paper towels

Find out more



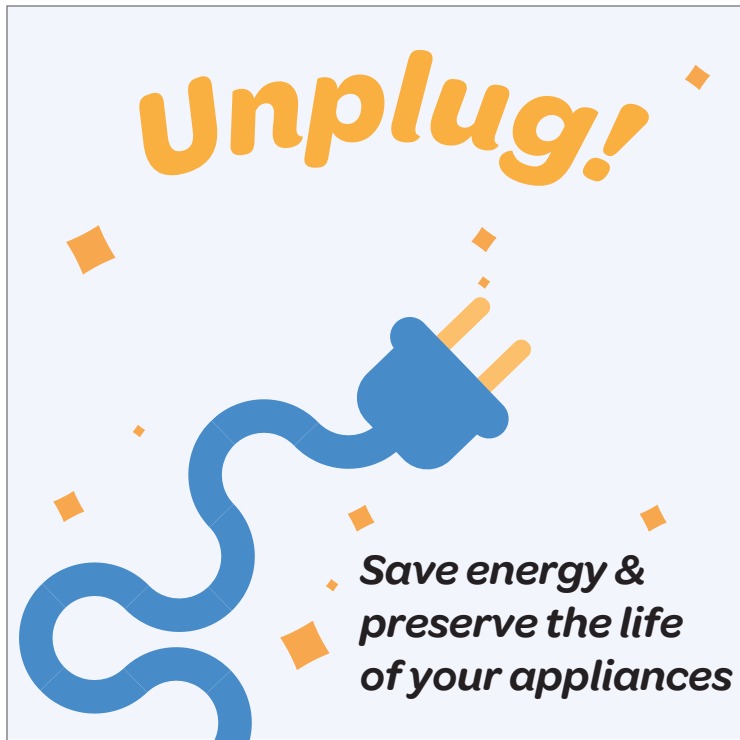
Ram's guide to recycling



Scan the QR code to find out more!



Social Media Graphics



Social Media Graphics

Be an eco-friendly Ram



This **reduces energy** needed to wash a load by **80%** and cleans clothes **just as effectively**



Social Media Graphics



Instagram Story

Go reusable.



By switching to a reusable water bottle, you can save an average of **156 plastic bottles** annually.

Prevent recycling contamination!



Contamination can happen when materials are recycled incorrectly, or if there is food residue left on materials.

This can cause the **entire load to be put in a landfill and not recycled.**

Tik-Tok Video

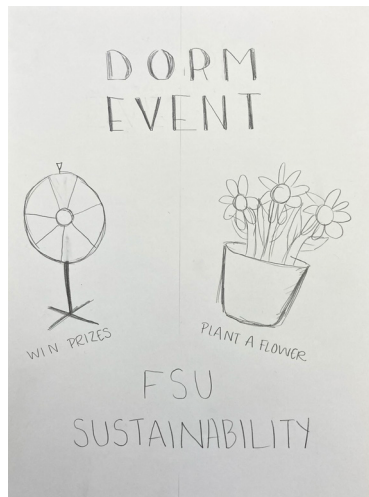


Next Steps



Recommendations

Recommendations



- On-campus events, education, games and challenges are created to encourage the campus community to participate in Framingham State's sustainability efforts. This section is a collection of ideas to help promote awareness and behavior changes for the entire community.
- Create an online resource for all campus sustainability efforts.
- Create a set of materials for RA's to use during floor meetings.
- Create a program for 'student sustainability ambassadors.'
- "A day in the life..." Tik Tok videos that follow one student's sustainability efforts throughout the day.
- Use of RAMS 101 courses or orientation for educating students on campus sustainability efforts.

Additional ideas:

- Ads, bigger recycling bins, more recycling bins
- Bottle return on campus
- Signs in elevators - people will actually read them
- Cheap reusable water bottles, incentive
- Free stuff - FOOD - PLANTS - spin wheel activities to get people interested
- Kahoot game - have people try out new things - connected more to ages mindset
- What time would work best for students?
- Exciting stuff - reason for going to event
- SNACKS - table of snacks

