

Institute for Social and Behavioral Sciences

University of Central Florida Student Sustainability Literacy Survey: Executive Summary

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UCF Student Sustainability Literacy Survey:

Executive Summary

Between February 2016 and June 2016, more than 2,000 University of Central Florida (UCF) students were surveyed about their attitudes, practices, and knowledge about environmental sustainability topics and the university's sustainability initiatives. Students were interviewed at various high traffic, main campus locations. Surveys were conducted as face-to-face, computer assisted personal interviews (CAPI) by trained, undergraduate volunteer researchers. Participants were approached using an "every Nth person" systematic random sampling technique. Among the 2,174 respondents that agreed to participate, 78 were excluded for not being a UCF student and 23 were excluded as they were under eighteen years old, resulting in a total sample size of 2,073 respondents.

FINDINGS

SUSTAINABILITY INTEREST

The first section of the survey assessed students' interest in sustainability practices. Students were asked to indicate the degree of importance they place on each of the following practices...

	Very Important	Important	Neutral	Unimportant	Very Unimportant
	%	%	%	%	%
Recycling	48.4	40.7	9.0	1.3	0.6
Minimizing waste sent to the landfill	46.2	39.2	12.4	1.8	0.5
Choosing food based on its impact	22.1	35.2	30.9	9.8	1.7
Conserving water	38.9	36.4	18.4	4.5	1.5
Purchasing eco- friendly products	24.9	44.7	24.3	5.2	0.8
Conserving energy	37.8	29.8	16.6	4.9	0.8
Minimizing emissions from transportation	36.0	34.8	21.1	6.3	1.7

Almost 90% of the participants considered recycling to be very important (48%) or important (41%). Similarly, approximately 85% of the sample considered minimizing waste sent to the landfill (such as reusable bags or drink containers) to be very important (46%) or important (39%). Approximately three-quarters of the sample believed it was very important (39%) or important (36%) to conserve water, such as taking shorter showers. Next, approximately 70% considered minimizing emissions from transportation (riding the shuttle or SunRail, carpooling, etc.) to be very important (36%) or important (35%). Similarly, 70% of the students in this sample believed it was very important (25%) or important (45%) to purchase eco-friendly products. Conserving energy, such as powering down electronic devices not in use for more than fifteen minutes or keeping thermostats between 74-78 degrees, was also viewed as very important (38%) or important (30%) by more than two-thirds of the sample. Lastly, approximately 57% of the participants believed that choosing food based on its impact, including locally sourced and organic foods, was very important (22%) or important (35%).

	Always	Usually	Sometimes	Rarely	Never
	%	%	%	%	%
Recycle	34.9	38.0	18.9	5.7	2.6
Minimize waste sent to the landfill	19.4	40.0	29.9	7.9	2.7
Choose food based on its impact	9.9	21.0	35.2	21.2	12.7
Conserve water	21.3	33.4	27.8	11.2	6.4
Purchase eco- friendly products	15.9	33.5	33.4	13.0	4.2
Conserve energy	29.3	36.3	22.1	8.3	4.0
Minimize emissions from transportation	16.2	23.6	26.6	19.8	13.8

In addition to measures of the importance of these sustainability practices, participants were asked how frequently they do the following practices...

Recycling was the sustainability practice most frequently performed. Approximately 73% of the students in this sample indicate that they recycle always (35%) or usually (38%).

The next most common sustainability practice was conserving energy, with approximately 66% of the participants indicating that they always (29%) or usually (36%) conserve energy, such as powering down electronic devices not in use or keeping thermostats between 74-78 degrees. Similarly, almost 60% of the sample indicate that they minimize waste sent to the landfill by using reusable bags or drink containers always (19%) or usually (40%). Approximately 55% indicate that they always (21%) or usually (33%) conserve water, such as taking shorter showers. Slightly less than half of the sample (49%) stated that they always (16%) or usually (34%) limit their purchases of single use or disposable items. Students were less likely to use alternative transportation, such as carpooling or using shuttles or SunRail, with 40% of the participants indicating they do this always (16%) or usually (24%). Lastly, students in this sample were the least likely choose food based on its impact with only 31% indicating that they do this always (10%) or usually (21%). Instead, students were more likely to indicate that they sometimes choose food based on its impact (36%).

Next, students' knowledge of different sustainability practices was assessed. Participants were asked to indicate which of the following examples of sustainable practices they were familiar with before taking this survey...

- **76.1%** indicated that they knew *recycling e-waste*, such as electronics, cellphones, etc. is an example of sustainability
- **72.4%** were aware that *purchasing reusable as opposed to single use, disposable items* is a sustainable practice
- **71.0%** knew *selecting double-sided printing* is a sustainable practice
- **60.5%** knew that *keeping indoor temperatures close to outdoor temperatures and dressing for that temperature* is an example of sustainability
- **50.0%** indicated that they knew *utilizing a powerstrip for all plugin devices* is a practice of sustainability
- **54.9%** were aware of *serving locally sourced/organic food* as an example of sustainability
- **35.1%** knew *limiting meat consumption*, such as participating in Meatless Mondays, was a sustainable practice
- **31.9%** were familiar with *using video conferencing as opposed to travel* as a practice of sustainability

Students were also asked about their level of interest in environmental sustainability. Most participants indicated they had some interest in sustainability (64%). An additional 18% considered themselves passionate about sustainability.



Approximately 12% of the students were neutral, and only 6% indicated they had little or no interest in sustainability.

SUSTAINABILITY LITERACY

The second section of the survey assessed students' sustainability literacy through the use of seven true or false questions.

- "Cradle to grave" refers to assessing a products lifecycle from creation to disposal.
 - 70.8% believed this to be true
 - 14.4% indicated this was false, and 14.8% indicated that they did not know.
- The term "carbon footprint" refers to the total sets of greenhouse gas emissions caused by an organization, event, product or individual.

• 83.1% considered this statement true

- o 12.1% stated it was false, and 4.8% said they did not know.
- Oil, iron ore, trees, sunshine and coal are considered renewable resources.
 - 68.5% of students stated this was false
 - 27.5% believed this to be true, and 4.0% did not know.
- With regard to natural resources, "sustainability" means using only as much as is replaced by natural processes.

75.4% indicated that this statement was true

- o 20.0% believed this was false, and 4.6% indicated that they did not know.
- In order to sustain life, the earth requires greenhouse gasses.

- 56.7% stated that this was true
- o 34.8% believed this to be false, and 8.5% did not know.
- The Urban Heat Island Effect is the increase in the number of cities that cut off exports and imports during hot summer months.
 - o 42.8% thought this statement was true
 - o 33.0% indicated that this was false
 - o 24.2% stated that they did not know
- A principle of Systems Thinking is addressing problems immediately so to not create new problems in the future.
 - o 75.7% stated that this was true
 - o 12.5% believed this to be false
 - o 11.8% indicated that they did not know

UCF SUSTAINABILITY INITIATIVES

The third section of the survey assessed students' awareness and interest in existing and future sustainability initiatives at UCF. First, students were asked about the means of communication that thev would personally prefer to learn about help them environmental sustainability. The participants were able to select multiple responses. The most frequently preferred methods include social media communication (57%),

W	nich communication methods would you	
pe	rsonally prefer to help you learn about	%
sus	stainability?	
	Social media	57.4
	Website	44.4
	Large educational events, such as Earth Day	40.9
	E-mail communication	38.7
	On-campus signs	37.7
	Public forums	24.9
	In-person workshops / classes	23.1
	Blogs	21.2
	Online workshops / classes	19.5

information on websites (44%) and large educational events, such as Earth Day festivities (41%). Students were the least likely to prefer in-person workshops or classes (23%), blog posts (21%), and online workshops or classes (19.5%).

Additionally, prior to taking this survey, participants were aware of the following sustainability programs implemented by UCF...

The most common sustainability program that students in this sample were familiar with was the free shuttles between campuses and around the campus (75%), followed by the

Of the following sustainability programs	mixed recycling bins	
implemented by UCF, mark which you were aware	%	(60%) and the bike
of prior to taking this survey?		(60%). More than
Free shuttles between campuses and around the campus	74.7	participants (52%)
Mixed recycling	60.5	the community
Bike share program	60.4	garden/arboretum at UCF. On the other
Community garden/arboretum	52.0	hand, the students in this sample were
Solar power installations and generation	45.3	the least familiar with the LEED
Zipcar/Zimride car sharing Program	41.6	Certification
Florida friendly campus landscaping	29.6	(14%), the
Sustainable dining options	21.1	university goal to achieve climate
LEED Certification requirements for all new buildings	14.5	neutrality by 2050 (13%) and the green purchasing
University goal to achieve climate neutrality by 2050	13.2	guidelines (13%) at UCF.
Green purchasing guidelines	12.8	

DEMOGRAPHICS

The last section describes the sociodemographic characteristics of the current sample, including the gender composition, age range, race/ethnic identities, class standing, and the colleges which participants are pursuing degrees in.

Gender, Age, and Race/Ethnicity

- 43.6% of the students in the sample are male and 55.2% are female. Less than 2% of the sample identified as transgender or other.
- The age of students range from 18-59, although approximately 90% of the sample is between the ages of 18 and 24 years old.
 - Approximately 12.4% were eighteen, 17.5% were nineteen, another 17.5% were twenty, 16.4% were twenty-one, and 13.2% were twenty-two. Less than ten percent of the sample include twenty-three year olds (8.0%), and slightly less than 5% were twenty-four (4.8%).
- Approximately 46% of the students in the sample are White, 19% identified as Latino/a, 15.9% are Black or African American, and 9.3% identified as Asian. An additional 6.2% considered themselves bi- or multi-racial. The remainder of the sample consists of Native Americans (0.5%), Pacific Islanders (0.7%), or some other racial or ethnic category (2.5%).

Class Standing and Academic Programs

- Freshman account for 15.2% of the sample. Sophomores are 18.4% of the sample, juniors account for 30.8%, and 25.6% are seniors. An additional, 10% of the sample consists of graduate level or other/non-degree seeking students.
- The colleges represented in the current sample, include the following proportion of participants...
 - 22.7% in the College of Sciences
 - 14.8% in the College of Engineering and Computer Science
 - 14.0% in the College of Health and Public Affairs
 - 13.5% in the College of Business Administration
 - 11.6% in the College of Arts and Humanities
 - 8.7% in the College of Medicine
 - 6.9% in the College of Education and Human Performance
 - 3.8% in the Burnett Honors College
 - 3.2% in the Rosen College of Hospitality Management
 - 2.4% in the Interdisciplinary Studies
 - 2.4% in the College of Graduate Studies
 - 2.4% in the College of Nursing
 - 0.9% in the College of Optics and Photonics

Appendix

University of Central Florida Student Sustainability Literacy Survey

This survey is being conducted by the University of Central Florida's Office of Sustainability Initiatives to assess our students' knowledge, practices, attitudes about environmental sustainability topics, and awareness about the university's sustainability initiatives.

Your participation is voluntary, you can stop at any time or refuse to answer any question. Your identity will remain anonymous and any feedback you provide will be kept confidential. Please give each question your full consideration.

The survey should take no more than 5-10 minutes to complete.

Are you a student at UCF?

- • Yes
- • No

Are you at least 18 years old?

- • Yes
- • No

Sustainability Interest

First I have a few questions about your interest in sustainability practices.

I am going to read a list of personal sustainability practices and would like you to tell me the degree of importance you place on each of them... are these practices Very Important, Important, Neutral, Unimportant, or Very unimportant?

INTERVIEWER: NOTE, you can re-read the response options every few questions

	Very Important	Important	Neutral	Unimportant	Very Unimportant	Not Sure (INTERVIEWER: DO NOT READ ALOUD: Only if Volunteered)
Recycling	C Recycling Very Important	C Recycling Important	C Recycling Neutral	C Recycling Unimportant	C Recycling Very Unimportant	Recycling Not Sure (INTERVIEWER: DO NOT READ ALOUD: Only if Volunteered)
Minimizing waste sent to the landfill (using reusable bags/drink containers)	C Minimizing waste sent to the landfill (using reusable bags/drink containers) Very Important	C Minimizing waste sent to the landfill (using reusable bags/drink containers) Important	C Minimizing waste sent to the landfill (using reusable bags/drink containers) Neutral	C Minimizing waste sent to the landfill (using reusable bags/drink containers) Unimportant	C Minimizing waste sent to the landfill (using reusable bags/drink containers) Very Unimportant	C Minimizing waste sent to the landfill (using reusable bags/drink containers) Not Sure (INTERVIEWER: DO NOT READ ALOUD: Only if Volunteered)
Choosing food based on its impact (locally sourced, organic)	Choosing food based on its impact (locally	Choosing food based on its impact (locally	Choosing food based on its impact (locally	Choosing food based or its impact (locally	Choosing food based on its impact (locally	Choosing food based on its impact (locally

	Very Important	Important	Neutral	Unimportant	Very Unimportant	Not Sure (INTERVIEWER: DO NOT READ ALOUD: Only if Volunteered)
	sourced, organic) Very Important	sourced, organic) Important	sourced, organic) Neutral	sourced, organic) Unimportant	sourced, organic) Very Unimportant	sourced, organic) Not Sure (INTERVIEWER: DO NOT READ ALOUD: Only if Volunteered)
						0
	0	0	0	0	0	Conserving water (taking
Conserving water (taking shorter showers)	Conserving water (taking shorter	Conserving water (taking shorter	Conserving water (taking shorter	Conserving water (taking shorter	Conserving water (taking shorter	shorter showers) Not Sure
·	showers) Very Important	rshowers) Important	showers) Neutral	showers) Unimportant	showers) Very Unimportant	(INTERVIEWER: DO NOT READ ALOUD: Only if Volunteered)
	Very Important	Important	Neutral	Unimportant	Very Unimportant	Not Sure (INTERVIEWER: DO NOT READ ALOUD: Only if Volunteered)
						0
	0	0	0	0	0	Purchasing eco-friendly
Purchasing eco- friendly products	Purchasing eco-friendly products Very Important	Purchasing eco-friendly products Important	Purchasing eco-friendly products Neutral	Purchasing eco-friendly products Unimportant	Purchasing eco-friendly products Very Unimportant	products Not Sure (INTERVIEWER: DO NOT READ
						ALOUD: Only if Volunteered)

	Very Important	Important	Neutral	Unimportant	Very Unimportant	Not Sure (INTERVIEWER: DO NOT READ ALOUD: Only if Volunteered)
Conserving energy (keeping thermostats between 74-78 degrees, powering down electrical devices when not in use for more than 15 min.)	Conserving energy (keeping thermostats between 74- 78 degrees, powering down electrical devices when not in use for more than 15 min.) Very Important	C Conserving energy (keeping thermostats between 74- 78 degrees, powering down electrical devices when not in use for more than 15 min.) Important	Conserving energy (keeping thermostats between 74- 78 degrees, powering down electrical devices when not in use for more than 15 min.) Neutral	C Conserving energy (keeping thermostats between 74- 78 degrees, powering down electrical devices when not in use for more than 15 min.) Unimportant	Conserving energy (keeping thermostats between 74- 78 degrees, powering down electrical devices when not in use for more than 15 min.) Very Unimportant	Conserving energy (keeping thermostats between 74-78 degrees, powering down electrical devices when not in use for more than 15 min.) Not Sure (INTERVIEWER: DO NOT READ ALOUD: Only if Volunteered)
Minimizing emissions from transportation (riding the SunRail, bike, walk, car pool, etc.)	C Minimizing emissions from transportation (riding the SunRail, bike, walk, car pool etc.) Very Important	C Minimizing emissions from transportation (riding the SunRail, bike, walk, car pool etc.) Important	C Minimizing emissions from transportation (riding the SunRail, bike, walk, car pool etc.) Neutral	C Minimizing emissions from transportation (riding the SunRail, bike, walk, car pool 'etc.) Unimportant	C Minimizing emissions from ntransportation (riding the SunRail, bike, walk, car pool etc.) Very Unimportant	Minimizing emissions from transportation (riding the SunRail, bike, walk, car pool, etc.) Not Sure ,(INTERVIEWER: DO NOT READ ALOUD: Only if

Volunteered)

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Next I am going to read a list of personal sustainability practices and would like you to tell me the frequency with which you do the following ... do you do them always, usually, sometimes, rarely, or never?

	Always	Usually	Sometimes	Rarely	Never
Recycle	C Recycle Always	C Recycle Usually	C Recycle Sometimes	C Recycle Rarely	C Recycle Never
Minimize waste sent to the landfill <i>(use reusable</i> <i>bags/drink containers)</i>	Minimize waste sent to the landfill (use reusable bags/drink containers) Always	Minimize waste sent to the landfill (use reusable bags/drink containers) Usually	Minimize waste sent to the landfill (use reusable bags/drink containers) Sometimes	Minimize waste sent to the landfill (use reusable bags/drink containers) Rarely	Minimize waste sent to the landfill (use reusable bags/drink containers) Never
Choose food based on its impact (<i>locally sourced,</i> organic)	Choose food based on its impact (locally sourced organic) Always	Choose food based on its impact (locally sourced organic) Usually	Choose food based on its impact (locally sourced 'organic) Sometimes	Choose food based on its impact '(locally sourced organic) Rarely	Choose food based on its impact I,(locally sourced, organic) Never
Conserve water (taking shorter showers)	Conserve water (taking shorter showers) Always	Conserve water (taking shorter showers) Usually	Conserve water (taking shorter showers) Sometimes	Conserve water (taking shorter showers) Rarely	Conserve water (taking shorter showers) Never
	Always	Usually	Sometimes	Rarely	Never
Limit purchasing single use or disposable products	C Limit purchasing single use or disposable products Always	C Limit purchasing single use or disposable products Usually	C Limit purchasing single use or disposable products Sometimes	Limit purchasing single use or disposable products Rarely	Limit purchasing single use or disposable products Never

INTERVIEWER: NOTE, you can re-read the response options every few questions

	Always	Usually	Sometimes	Rarely	Never
Conserve energy (keeping thermostats between 74- 78 degrees, powering down electrical devices when not in use for more than 15 min.)	Conserve energy (keeping thermostats between 74-78 degrees, powering down electrical devices when not in use for more than 15 min.) Always	Conserve genergy (keeping thermostats between 74-78 degrees, powering down electrical devices when not in use for more than 15 min.) Usually	Conserve energy (keeping thermostats between 74-78 degrees, powering down electrical devices when not in use for more than 15 min.) Sometimes	Conserve energy (keeping thermostats between 74-78 degrees, powering dowr electrical devices when not in use for more than 15 min.) Rarely	Conserve genergy (keeping thermostats between 74-78 degrees, powering down electrical devices when not in use for more than 15 min.) Never
Use alternative transportation (the shuttle or SunRail, bike, walk, car pool, etc.)	Use alternative transportation (the shuttle or SunRail, bike, walk, car pool, etc.) Always	Use alternative transportation (the shuttle or SunRail, bike, walk, car pool, etc.) Usually	Use alternative transportation (the shuttle or SunRail, bike, walk, car pool, etc.) Sometime	Use alternative transportation (the shuttle or SunRail, bike, walk, car pool, setc.) Rarely	Use alternative transportation (the shuttle or SunRail, bike, walk, car pool, etc.) Never

Of the following, which did you know was an example of sustainable practices before taking this survey? (Please select all that apply)

- Recycling e-waste (electronics, cell phones, etc.)
- Selecting double-sided printing
- Serving locally sourced/organic food
- Limiting meat consumption (i.e. Meatless Mondays)
- Purchasing reusable as opposed to single use, disposable items (ceramic vs. paper plates)
- C Keeping indoor temperatures close to outdoor temperatures and dressing for that temperature
- Utilizing a power strip for all your plug-in devices
- Using video conferencing as opposed to travel

Please indicate which statement best describes your level of interest in sustainability: (Please select one)

• C I have a passion for sustainability

- • I have some interest in sustainability
- C I am neither interested nor disinterested in sustainability (neutral)
- • I have little interest in sustainability
- C I have no interest in sustainability

Sustainability Literacy

Next I am going to ask you a few true/false questions about Sustainability.

Please answer the following questions to the best of your ability.

True or false... "Cradle to grave" refers to assessing a products lifecycle from creation to disposal.

- ^C True
- C False
- C Do not know (INTERVIEWER: DO NOT READ OPTION ALOUD)

True or false... The term "carbon footprint" refers to the total sets of greenhouse gas emissions caused by an organization, event, product, or individual.

- ^O True
- False
- C Do not know (INTERVIEWER: DO NOT READ OPTION ALOUD)

True or false... Oil, iron ore, trees, sunshine and coal are considered renewable resources.

- ^O True
- C False
- C Do not know (INTERVIEWER: DO NOT READ OPTION ALOUD)

True or false... With regard to natural resources, "sustainability" means using only as much as is replaced by natural processes.

- C True
- C False
- O not know (INTERVIEWER: DO NOT READ OPTION ALOUD)

True or false... In order to sustain life, the earth requires greenhouse gasses.

- ^O True
- C False
- O not know (INTERVIEWER: DO NOT READ OPTION ALOUD)

True or false... The Urban Heat Island Effect is the increase in the number of cities that cut off exports and imports during hot summer months.

- ^O True
- C False
- O not know (INTERVIEWER: DO NOT READ OPTION ALOUD)

True or false... A principle of Systems Thinking is addressing problems immediately so to not create new problems in the future.

- ^O True
- C False
- C Do not know (INTERVIEWER: DO NOT READ OPTION ALOUD)

Sustainability Initiatives

Next, I have a few questions about campus sustainability initiatives

Which communication methods would you personally prefer to help you learn about sustainability? (Please select all that apply)

- 🗖 Email
- Social media
- Blogs
- Website
- Online workshops/classes
- In-person workshops/classes
- Public forums
- Large educational events, such as Earth Day
- On-campus signs

Of the following sustainability programs implemented by UCF, mark which you were aware of prior to taking this survey: (Please select all that apply)

- The university goal to achieve climate neutrality by 2050
- LEED Certification requirements for all new buildings
- Solar power installations and generation
- Florida friendly campus landscaping
- Community garden/Arboretum
- Green purchasing guidelines
- Mixed recycling
- Sustainable dining options
- Free shuttles between campuses and around the campus
- Bike share
- Zipcar/Zimride car sharing program

Demographics

Lastly I just have a few more questions about yourself...

What is your sex/gender?

- [©] Male
- ^C Female
- C Transgender
- ^C Other

-

What is your racial/ethnic identity? (Please select one)

• •	White/Caucasian
-----	-----------------

- C Latino/a
- Black or African American
- C American Indian or Alaska Native
- Native Hawaiian or Other Pacific Islander
- C Asian
- Bi- or Multi- Racial
- Other

How old are you?

What is your current academic level?

- Freshman
- C Sophomore
- ^O Junior
- C Senior
- Graduate student
- ^O Other

In which academic school(s) or college(s) are you pursuing a degree(s)? (Please select all that apply)

- College of Arts and Humanities
- The Burnett Honors College
- College of Business Administration
- College of Education and Human Performance
- College of Engineering and Computer Science
- College of Graduate Studies
- College of Health and Public Affairs
- College of Medicine
- College of Nursing
- College of Optics and Photonics
- Rosen College of Hospitality Management
- College of Sciences
- Interdisciplinary Studies

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