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STARS & MEDIA LITERACY *FINAL REPORT*

CREATING AN ASSESSMENT OF CAMPUS SUSTAINABILITY
LITERACY AND INVESTIGATING METHODS TO OPTIMIZE
UCLA SUSTAINABILITY'S COMMUNICATIONS REACH.

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Abstract

Previous research has established the importance of communicating effectively to change behavior regarding sustainability. In particular, a lack of knowledge can prevent individuals from engaging in further sustainable behavior. This project builds on existing work by striving to understand how knowledgeable UCLA students are and how UCLA Sustainability can leverage mass communication to increase that knowledge. This project will identify topics that UCLA students do not understand and devise specific approaches to increase awareness of these topics, working alongside UCLA Sustainability to optimize existing communication channels. We will need to collect data using multiple methods, including interviews, focus groups, and a survey. Our initial interviews with sustainability professionals provided guidance on how to measure sustainability literacy and how to craft communication materials that will resonate with the student body. While our team initially encountered challenges with narrowing our scope and constructing a survey given our tight timeline, these interviews have also helped clarify our project's direction. Our focus groups allowed us to gather qualitative data about how students prefer to receive information. Our survey results revealed that, while students knew much less about UCLA policies compared to general sustainability knowledge. Ultimately, findings will help inform UCLA's next Sustainability Tracking, Assessment & Rating System (STARS) report at the end of this year and contribute to a more sustainable campus by increasing sustainability knowledge on campus through mass communications.

Introduction

Launched in 2006, the Sustainability Tracking, Assessment, and Rating System (STARS) has become the primary framework for evaluating sustainability performance in higher education. Administered by The Association for the Advancement of Sustainability in Higher Education (AASHE), STARS uses standardized, self-reported metrics across categories such as Academics, Engagement, and Operations to assess institutional progress and enable benchmarking among peer institutions. While UCLA has maintained a consistently high STARS rating, reflecting strong performance in areas such as operations and institutional planning, the university has not been able to earn points for certain STARS credits in the Academic category—namely, the sustainability literacy category that focuses on knowledge about environmental issues. Campuses can earn additional STARS credit in this category by conducting a survey of sustainability literacy on campus, but UCLA has not previously had the capacity to do so. This project addresses that gap directly, helping UCLA earn additional points in its next STARS report while offering insights about sustainability-related knowledge among the student body.

Existing studies have demonstrated the power of sustainability literacy by showing that perceptions of climate change can be influenced by exposure to media and information. For instance, in one study, researchers found that exposure to segments from the 2015 United Nations Climate Change Conference (COP21) could promote increased belief in climate change in some populations (Wonneberger et al., 2019). At UCLA, previous SAR projects have explored the field of sustainability literacy by identifying how low levels of knowledge posed a barrier to engaging in more environmentally-conscious behaviors (Ginodia et al., n.d.). This project will further delve into how much students understand about sustainability and how they engage with

communications from UCLA Sustainability, a department within UCLA Administration. This project will look beyond preferred communication platforms to explore what kind of information the student body is lacking.

Our main guiding question in this research is: How sustainability literate are UCLA students, and how can UCLA Sustainability optimize its communication strategies to increase sustainability literacy? In order to achieve this goal, our team built a survey based largely on a previously validated sustainability literacy survey created by a team at University of California, Riverside (UCR) (see Appendix B) (Kopko et al., 2026). Our primary variable of study will be the correctness of student responses. In addition, we collected expert testimony from professionals working in sustainability-related fields in order to assess how well information regarding sustainability is communicated and understood. The results of our survey and mass communications research will provide actionable recommendations to UCLA Sustainability for enhancing outreach, increasing sustainability literacy, and deepening student engagement. Our end goal is to help UCLA Sustainability create a change in campus culture, informed by data on the campus's knowledge of sustainability policies and ecological concepts.

Methods

Our team used a mixed methods approach, which we determined appropriate, based on the needs of our stakeholder, our research into previous sustainability literacy projects, and our conversations with our faculty advisors, Carl and Cully. We first established a baseline framework with informational interviews, then collected feedback in focus groups, and finally collected data through a campus-wide survey.

Our first goal is to understand how literate UCLA students are about sustainability. We decided to conduct interviews to give us insight into how other campuses have measured sustainability literacy and what information we should include in our own sustainability literacy survey. While speaking to sustainability professionals on other campuses, we found that other institutions had already done similar work, so the most efficient approach for this project was to adopt their validated survey questions and adapt them to UCLA's sustainability goals (see Appendix B). Since these questions were already validated by experts, they helped our team avoid skewing the questions with our own bias. Next, we convened a focus group to pilot our survey and get detailed feedback on whether our questions are effective. The focus group helped us test our questions with real students before survey distribution. It also created a space for students to share their thoughts on sustainability policies and gaps in our project scope. Following the focus group, we employed surveying in our project, as it is the most effective method to gather quantifiable metrics from a large body of students in a way that truly represents the full student population. In addition to serving as a way for UCLA to establish a baseline, surveying is the required medium for campuses to earn sustainability literacy points on the STARS report. The goal is to reach as many students as possible and turn the themes we have been hearing into quantifiable data we can report on.

Our second goal is to build a set of recommendations for communications from UCLA Sustainability. This deliverable will be informed by our sustainability literacy survey in addition to interviews, focus groups, and data analytics. We decided to conduct another set of interviews with professionals and researchers focusing on effective communication strategies. These interviews will give us greater insight on what communication tools are most effective for transmitting sustainability knowledge to the public. In order to localize our insights to the UCLA

campus, we held another focus group to test communication strategies and collect direct feedback from students. In this case, a focus group setting is the most effective way for us to garner detailed feedback about UCLA Sustainability's mass communications and potential strategies to increase its reach.

At every stage, we have made a point of centering diversity, equity, and inclusion. For instance, we recruited for our focus groups and surveys through Living Learning Communities, cultural resource centers, and the Dashew Center to ensure we are not just hearing from students who are already heavily involved in sustainability spaces. Similarly, we ensured that our surveys and focus groups are accessible. Using a platform like Qualtrics, we can ensure that our survey can be read by individuals with visual impairments using a screen reader. We also worked directly with focus group participants to ensure that their accessibility needs are met -for example, ensuring that the focus group location is accessible by wheelchair and that any provided foods are allergen-free. Throughout the process, we have also consulted with outside experts on survey design to identify any blind spots in how we ask questions. Overall, each of our methods builds on the last, making for a powerful multi-method project.

Challenges

With the ultimate goal of comprehensively understanding environmental literacy across the entire student body, scope and time were the largest issues our team faced. Since the STARS report is so vast with numerous categories, it was difficult to assess what we could accurately and comprehensively address within our limited project time frame. Specifically, our team struggled to determine whether to focus on sustainability literacy or culture and who our exact target population would be. On top of this issue, the feasibility of creating a survey in this limited time

frame was brought to the team's attention both by interviewees and our faculty advisors. The initial idea was to create a survey entirely from scratch, but this later proved to be unrealistic given the short duration of our project—especially compared to a similar endeavor like the UCR sustainability literacy survey.

Conversations with our stakeholder (Christophe LaBelle, UCLA Sustainability) and with other sustainability professionals proved to be instrumental in overcoming our initial challenges. After valuable meetings with Christophe, we were able to narrow the scope of our project down to sustainability literacy among UCLA undergraduates. For literacy, the STARS report only requires surveying the biggest population segment. For sustainability culture, on the other hand, STARS requires a survey of a sample that is entirely representative of the campus, including graduate students, faculty and staff, which would pose a different set of challenges. Regarding the survey itself, Kopko and her team at UCR agreed to let us adapt questions from the UCR survey, making it more feasible to produce a high quality survey on a compressed timeline.

In the process of seeking solutions to our early challenges, the team learned a number of valuable lessons which have influenced our approach for the Spring Quarter. One of the earliest takeaways was to regulate expectations and ambitions into a realistic goal. As much as we wanted to use a completely new survey designed to reach all students to collect a full data set including staff and graduate students, this was unfortunately not a feasible outcome within our time and capacity limits. In order to manage our tight timeline after our challenges delayed progress, the team learned to be more proactive and deadline sensitive than initially anticipated. As valuable as all of these lessons were, we found that our biggest takeaway was the importance of seeking out professional guidance early on to guide our work.

Results

Interviews

Over the course of the first ten weeks working on the project, our group developed a comprehensive understanding of how a culture of sustainability is fostered in university settings through policy, campus communications, and student comprehension. The AASHE STARS report takes a primarily qualitative approach to sustainability assessment. However we also drew on human-centered sources, rather than relying solely on data and figures to tell the whole story (see Appendix A). In order to ensure our approach could draw on a wide range of experiences, we conducted interviews with sustainability professionals at peer universities across the country.

One of our first interviews was with Kristen Kopko, the Research Manager at UCR's Center for Community Solutions, and was formative to the direction of our project. Over the course of the year prior, Kopko's team had been working to develop a sustainability literacy assessment, informed by the criteria of the STARS report, that could be adapted at campuses across the UC system. Their assessment was constructed to measure student knowledge across the environmental, social, and economic domains of sustainability. At this stage in our project, we had anticipated designing and testing our own survey. That assumption quickly repositioned after hearing Kristen describe the depth of her team's process, which involved making a list of over 400 literature-based survey questions, and having their assessment validated by surveying experts. Kopko's most actionable recommendation was to adopt and adapt an existing validated survey instead of creating one ourselves.

Our next interview with Tania Anders, Sustainability Faculty Coordinator at Mt. San Antonio College, shed some light on the institutional conditions that promote sustainability literacy. Anders confirmed that students outside of the natural sciences are often intimidated by

sustainability topics, mirroring our concern that survey responses may be biased towards students in the natural sciences. Her response to this challenge has been to develop field-specific curricula that meet faculty where they are, helping us consider how our survey questions can “meet students where they’re at.” Additionally, Tania provided crucial insight on the particulars of literacy and how it can be differentiated from sustainability culture. Sustainability culture encompasses behaviors, feelings, and attitudes (e.g., "How do you feel about recycling on campus?"), whereas sustainability literacy is strictly knowledge-based (e.g., "What is the most common cause of emissions?").

Our third interview was with the current co-principal investigator for the Sustainability Cultural Indicators Program at the University of Michigan, John Callewaert. By discussing the benefits of focusing on sustainability literacy and how to effectively conduct focus groups and interviews, we were able to further narrow our scope and flesh out our methods. It is easier to conduct research on the literacy levels of a campus because correctness is a simpler measurement than self-assessment of sustainable behaviors. The STARS report considers sustainability literacy and culture differently. While culture is assessed on a school wide basis, including undergraduates, graduate students, faculty and staff, the literacy portion allows for only the largest subsegment of the population to be assessed in order to determine a valid test. Callewaert also shared strategies to maximize survey engagement using incentives for participants.

Our fourth interview was with Wändi Bruine de Bruin, a professor of public policy, psychology, and behavioral science at the University of Southern California who has extensively studied climate communication. Bruine de Bruin emphasized that using everyday language and clear explanations are crucial for ensuring our communications are accessible to the student body. This interview also provided us with insights on what kind of content may be effective in

increasing sustainable behaviors. Climate anxiety and simple lack of knowledge about viable solutions can pose barriers to behavior change; focusing on increasing knowledge in these areas can maximize impact on students. Interestingly, this was shown to have impacts on students and their mental health as well. The relation between knowledge of these general topics and knowledge and understanding of the behaviors required to act upon it was found to be very impactful to the end result. Either of these without its counterpart generally can be found to produce undesirable outcomes in students.

Our fifth and final interview was with Bonny Bentzin, Deputy Chief Sustainability Officer for UCLA. Bentzin helped us understand what kind of information would be most helpful to UCLA Sustainability. Namely, the office wanted to understand where students preferred to receive information and how to best communicate that information. Bentzin also highlighted the information that UCLA Sustainability most wanted students to know about: UCLA's Single-Use Plastics Policy, waste-sorting on campus and how waste is processed, campus electricity sources, and move-in and move-out initiatives to reduce waste.

Focus Groups

Building off of the information shared with us through our interviews, we explored student perspectives through a series of focus groups. These focus groups allowed us to facilitate discussion about the policies discussed in our interviews and generate ideas for how to best connect with the student body. Both of the focus groups were held with an open discussion format, with the main goal being to get as much raw data and quotes as possible. Through this, we were able to get a good picture of the general undergraduate student views and their experiences.

Our first focus group served to pilot our survey before releasing it to the broader student body. We recruited 10 undergraduate students from different campus organizations to take our survey and provide feedback. Generally, participants reported a clear understanding of all questions, even if they did not come from environment-focused backgrounds. This was especially true when considering specific terminology, though all of the participants mentioned that they were able to adequately guess what the terms meant. As for the actual findings from the survey itself, similarly to the rest of the data gathered in the survey, the overall knowledge and understanding of general sustainability topics was much higher, reaching about 85%, while the UCLA specific questions got approximately 10%. After discussions with the focus group, we discovered that the participant who correctly chose the answer to one of the campus specific questions had guessed the answer. Though all ten participants reported understanding the question, none were able to confidently answer most questions. Participants informed us that they would be more likely to fill out a survey if it came from official sources like UCLA Sustainability and if they were consistently reminded about the survey. Some official sources include MyUCLA, classes, and official departments and their newsletters. The focus group also allowed us to identify topic gaps and improvements for the survey. Students noted that food waste; the three “R’s” of reduce, reuse, and recycle; and ocean pollution seemed like important topics that were not touched on in the original survey. As the survey took participants between two and twelve minutes, participants also suggested prefacing the length and including a progress bar on the survey. This was one of the recommendations given to ensure survey completion once the participants had started it. Others include mentioning and presenting the incentives more predominantly in the initial screens. For this survey, the incentives were obtained through The Green Initiative Fund as a grant for student deposits. These allowed for 20

students to receive 20 dollars on their Bruin Cards after submitting a separate survey which permitted us to identify them and reach out with the funds.

Our second focus group centered on mass communications. It was difficult to foster discussion with so many participants in the initial focus group, so we recruited a smaller group of seven students in this round. This has been considered to be somewhat more effective in fostering open discussion. Previous studies also confirm this to be more efficient for focus groups. Through this focus group, we aimed to understand the best ways to reach students and the kinds of content they are most likely to engage with. We found that students were most likely to engage with information from localized sources-for instance, information from their department or clubs that they are a part of. While students would engage with both emails and social media, they were most likely to click on content that directly affected, or was relevant to, their everyday lives. For instance, participants highlighted emergency alerts, research opportunities, and giveaways as information that was directly applicable to their lives. Senior undergraduate students, in particular, were also attentive to career opportunities. Broadly, students were also interested in the impacts of policies and novel research. Students noted that they would want to learn more about how initiatives like waste sorting have affected sustainability in the long run, which could affect their willingness to participate in these initiatives. In addition to these sorts of initiatives the students also reported a strong interest in the relation between their actions, or the school's overall, and the actual results achieved from these policies. In terms of format, participants voiced interest in short-form video content on social media with options to learn more through external links or webpages. Timing of communications was also important, as students were less likely to engage with content while balancing academic responsibilities. Participants suggested timing key communications for

breaks, both between academic quarters and examination schedules, when they would have more time to engage with the content.

Survey

We opened our survey on April 22, and it remained open for 22 days and garnered a total of 231 responses. We filtered out responses that did not reach a question completion threshold of at least 22%, leaving us with 175 responses. For our first stage of analyses, we looked at the demographics of our 175 respondents, considering important identifiers such as their academic discipline, year of study, and whether they were a traditional or transfer student. What we found was a nearly even spread across academic years (Fig. 1a), while nearly 90% of respondents were traditional students, rather than transfers (Fig. 1b). Discipline-wise, Life and Physical Sciences (29.7%), Social Sciences (24.6%), and Environmental Studies (13.1%) were the most represented, but crucially, every academic field had respondents (Fig. 2a). That matters because one of our core EDI goals was to capture perspectives beyond already sustainability-engaged students.

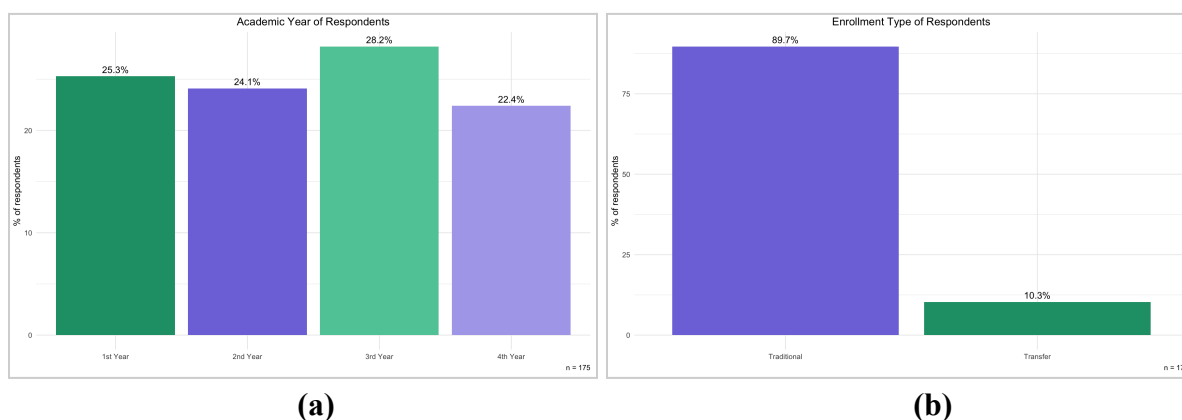
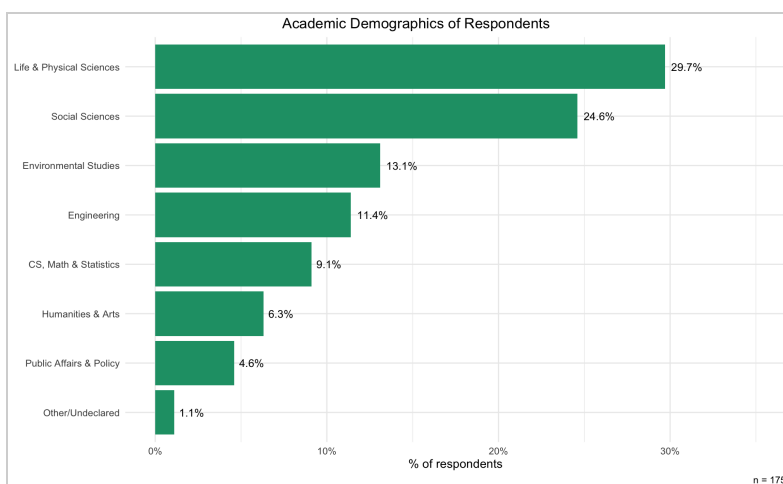
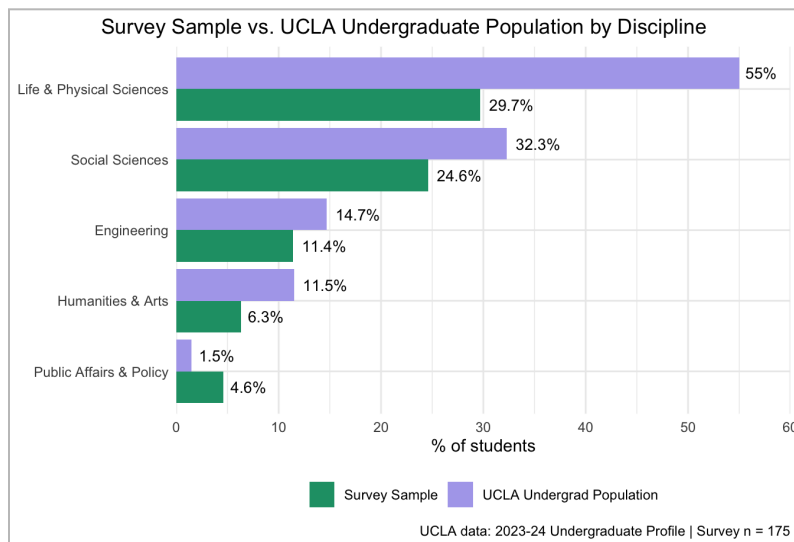


Figure 1: Distribution of academic year (a) and enrollment type (b) among respondents.



(a)



(b)

Figure 2: Distribution of academic discipline (a) among respondents, as well as survey academic discipline demographics compared to the general UCLA population (b).

Overall, our student respondents demonstrated solid general environmental literacy, with an average accuracy of 74% on broad sustainability questions and most respondents scoring a passing 7 out of 10 (Fig. 2b). Where things got interesting was that UCLA-specific knowledge was considerably weaker, dropping to an average accuracy of just 27%. This shows that students

are picking up environmental awareness from the world around them; UCLA's programs haven't quite broken through. The hardest general sustainability question addressed stormwater management (Appendix B: question 7), while campus-specific questions were the lowest-scoring overall.

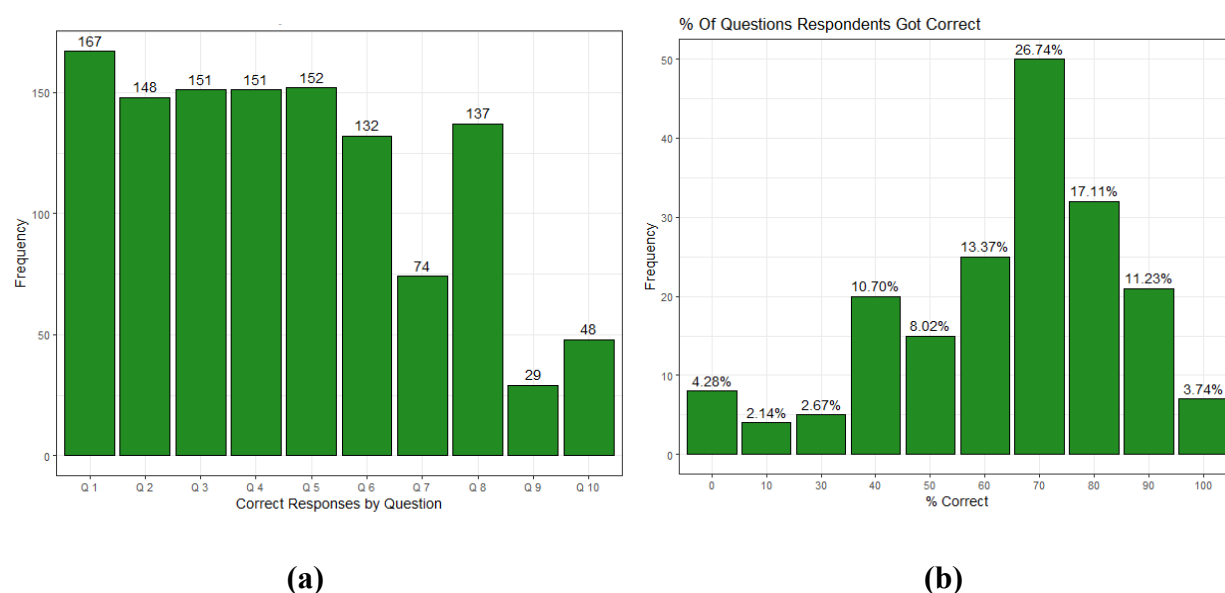


Figure 2: Distribution of correct answers to each sustainability literacy question on our survey (a) and distribution of scores on the sustainability literacy section as a whole (b).

Environmental studies, public affairs, and policy majors tended to outperform the other disciplines (Fig. 5). Traditional students also outperformed the transfer population, with 64.7% compared to 52.8% (Fig. 4). Knowledge was also consistent across year groups, with fourth years scoring slightly higher at 68.2% (Fig. 3). But scores were still fairly consistent, meaning time on campus may not have moved the needle much.

Developing our demographics analysis further, we used a Kruskal-Wallis test¹ to examine whether sustainability knowledge scores differed across academic years. The test revealed no

¹ A non-parametric statistical test comparing the mean/mean score of multiple independent samples with different sample sizes.

statistically significant difference in scores across year groups. The chi-squared statistic ($H = 5.23$) represents how score rankings varied across the four year groups. A value this small indicates minimal systematic differences between groups. The p-value ($p = 0.156$) indicates that there is a 15.6% probability of observing these differences this large by chance, which exceeds the conventional threshold of 5% ($p = 0.05$). This value is insufficient evidence of a statistically significant relationship. In order to compare the mean/median scores once again, we used Wilcoxon tests which confirmed our findings from the Kruskal-Wallis test. Median scores were identical across 1st, 2nd, and 3rd year students ($Mdn = 70\%$) and mean scores were nearly equivalent ($M = 61.8\%$, 62.6% , and 61.8% respectively), with 4th year students showing a slightly higher mean ($M = 68.2\%$) but this difference did not reach statistical significance.

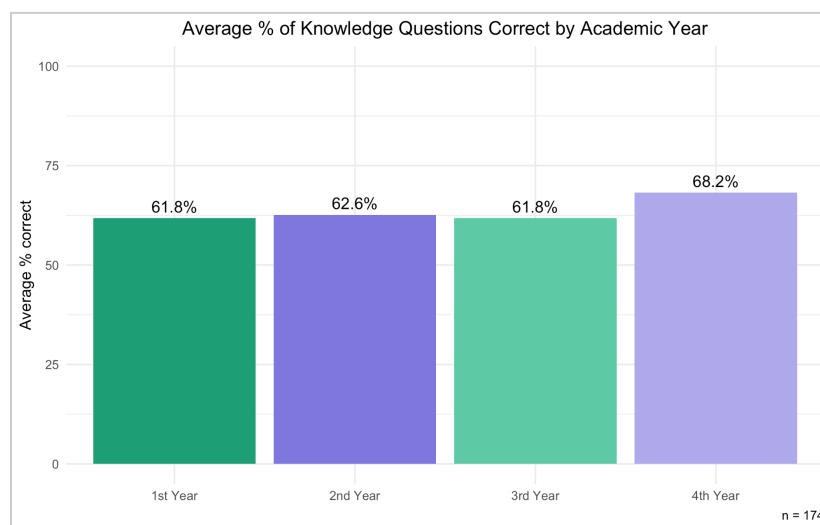


Figure 3: Accuracy on sustainability literacy questions by academic year.

We also examined whether sustainability knowledge scores differed between traditional and transfer students, once again using a Wilcoxon rank sum test. It is worth noting that the transfer sample is small ($n = 18$), which limits how confidently we could statistically generalize this finding. Proceeding with the respondents we did have, we found a significant difference

between the two groups ($W = 1915$, $p = .010$). The W statistic ($W = 1915$) represents the sum of ranks for the traditional student group, indicating that traditional students consistently ranked higher in accuracy scores relative to transfer students. The p -value ($p = .010$) indicates that there is only a 1% probability of observing a difference this large by chance. Traditional students scored notably higher ($Mdn = 70\%$, $M = 64.7\%$) compared to transfer students ($Mdn = 55\%$, $M = 52.8\%$), a difference of 11.9 percentage points in mean scores. Based on these values we can cautiously infer that the difference in scores between traditional and transfer students is statistically significant, and indicates greater accuracy from traditional students.

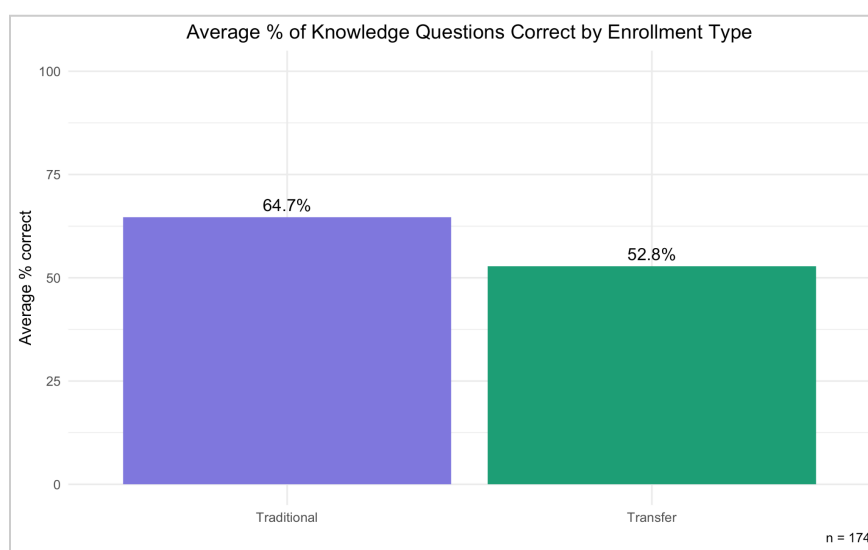


Figure 4: Accuracy on sustainability literacy questions by enrollment type.

Finally, to test whether Environmental Studies majors were statistically more accurate than all other disciplines, we used a Wilcoxon rank-sum test² to compare the mean/median accuracy between each group. This revealed that Environmental Studies students ($Mdn = 80\%$, $M = 76.5\%$) scored significantly higher on sustainability knowledge than students in all other

² A non-parametric t-test of two independent samples. Measures whether two groups have systematically different values without assuming a normal distribution

disciplines combined (Mdn = 70%, M = 61.7%), $W = 817.5$, $p = 0.0000253$. This p-value ($p < .001$) shows that the probability of observing a difference this large by chance alone is less than 0.1%. A probability value as low as this provides strong evidence that the difference in scores between the two groups is statistically significant rather than due to random variation.

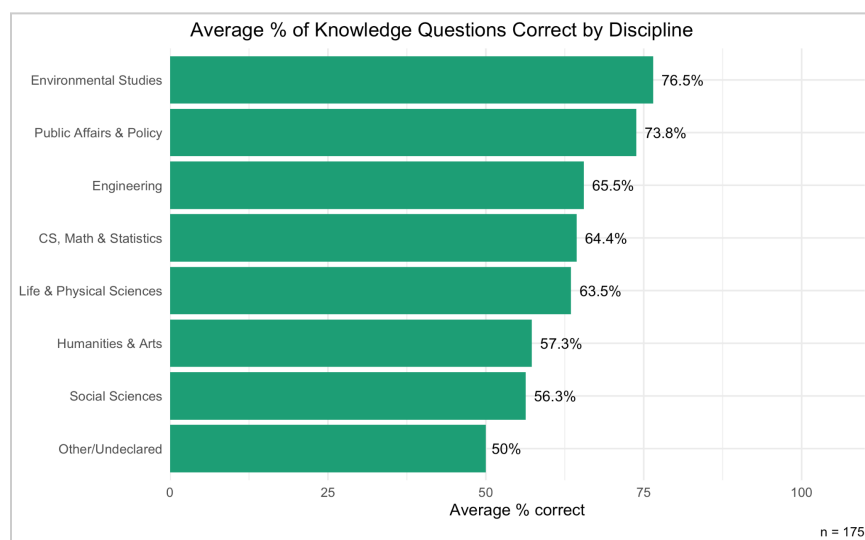


Figure 5: Accuracy on sustainability literacy questions by academic discipline.

Regarding attitudes and behavior, 57% of respondents agreed that UCLA cares about sustainability (Fig. 6). Students broadly perceived the campus as fostering a shared sustainability culture between institutions and students. One of the most fascinating findings is that only 43% of students felt very or extremely confident making their own sustainable choices. Still, we found that students still engaged in sustainable behaviors. For instance, 70% of surveyed students chose to donate or give away items when moving out as opposed to disposing them in the trash (Fig. 6).

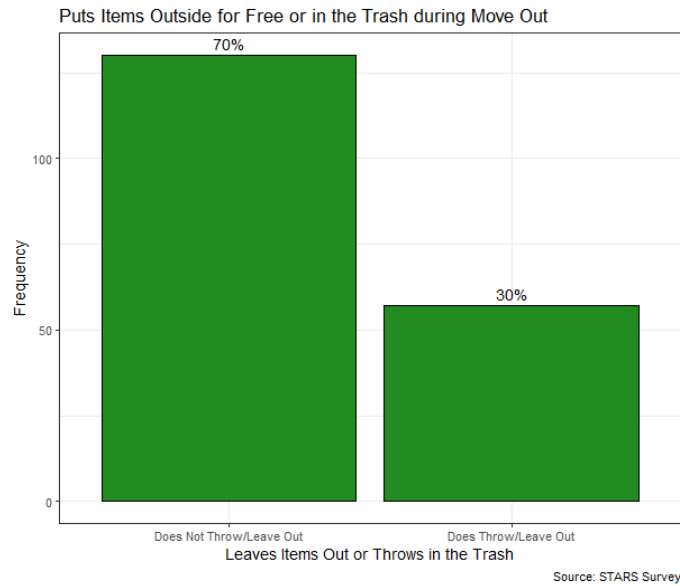


Figure 6: Distribution of students who dispose of items in the trash when moving out and those who choose alternative methods.

A notable pattern also emerged when cross-referencing knowledge and behavior. Students who correctly answered the general plastics question were far more likely to use a reusable water bottle, with 86% compared to 14% (Fig. 7a). However, this trend did not transfer to students participating in UCLA’s reusable container program (Fig. 7b). This suggests that sustainability knowledge more readily shapes individual behavior than engagement with institutional-level programs. This is a clear disconnect between awareness and participation that better campus communication could hopefully help address.

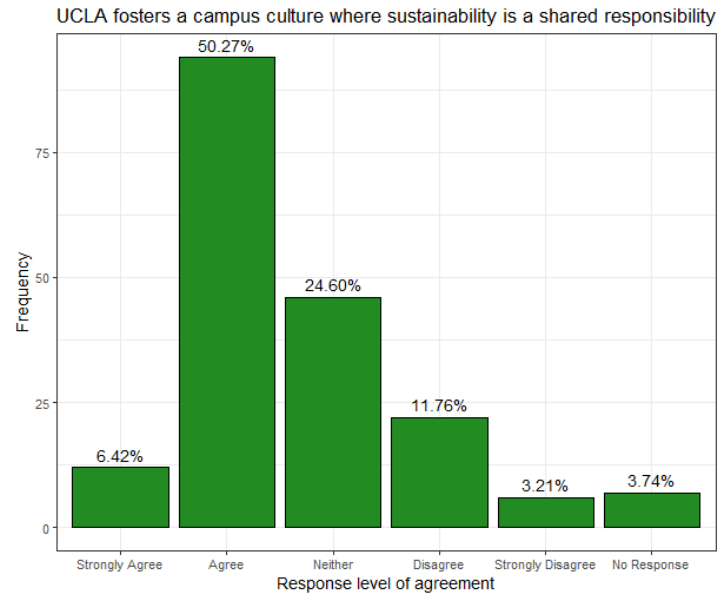


Figure 7: Distribution of agreement with the statement “UCLA fosters a campus culture where sustainability is a shared responsibility.”

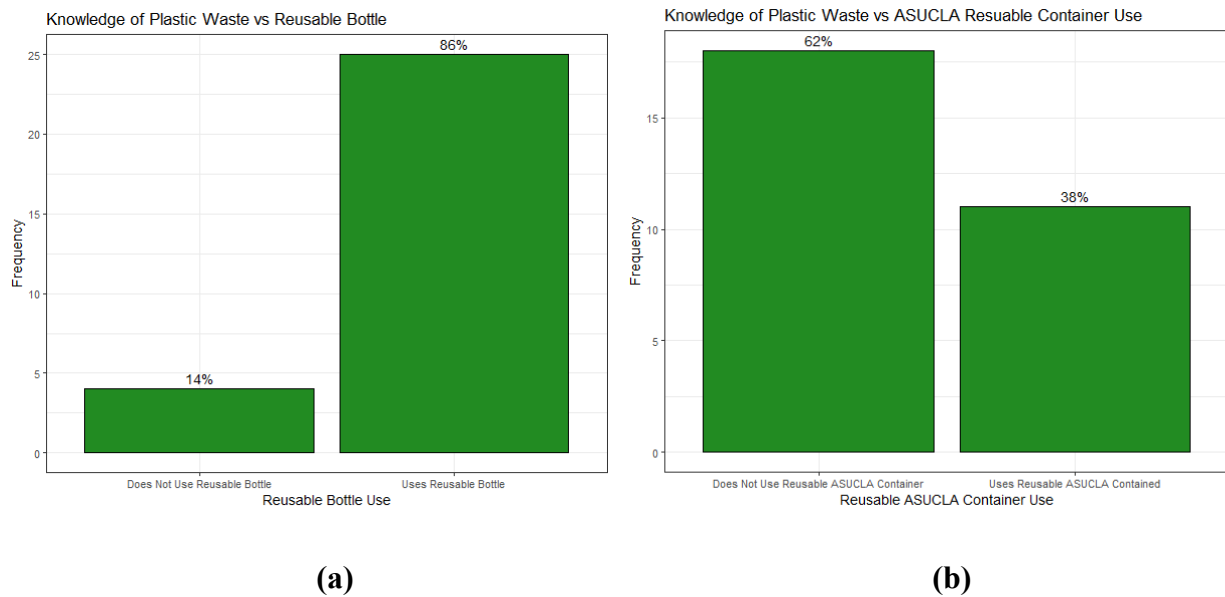


Figure 8: Distribution of reusable bottle use (a) and ASUCLA reusable container use (b).

Our survey also provided a chance to examine some sustainability knowledge longitudinally. A 2023 SAR project surveyed students on which UCLA Sustainability initiatives they had previously heard about (Ginodia et al., n.d.). Their survey of 149 individuals found that 86% of students had heard of at least one sustainability initiative on campus. Our survey found that only about 74% of students had heard of at least one sustainability initiative. This finding suggests that sustainability knowledge may have decreased over time. In addition, in our survey, we found that the most commonly known initiative was plant-forward dining initiatives. This finding is in line with the 2023 survey, which found that sustainable food practices—along with the Zero Waste policy and Sustainability Plan—were the most commonly known initiatives. While there may have been a drop in sustainability knowledge, there has also been some consistency over time. Although, these comparisons should be viewed cautiously. While our survey question included most of the initiatives included on the 2023 survey, we did not replicate the same wording. Differences in wording may serve as a confounder.

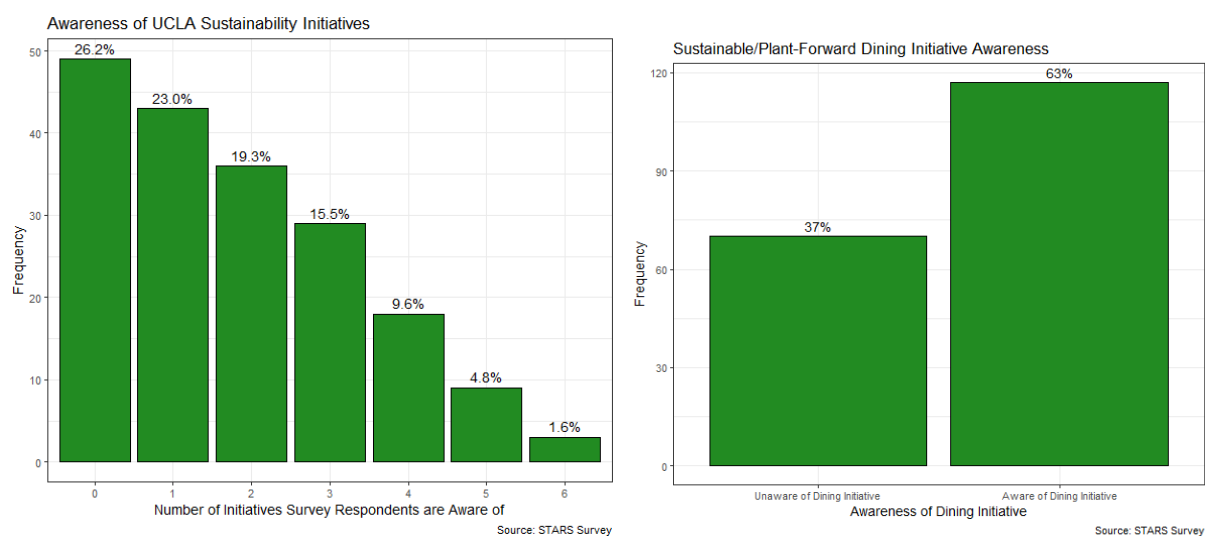


Figure 9: Distribution of the number of sustainability initiatives students are aware of (a) and distribution of students that are aware of plant-forward dining initiatives (b).

Discussion

To address our main research question, we examined how different student groups engaged with sustainability-related information on campus. Based on survey responses, most students received sustainability information through more localized sources such as academic coursework and student organizations. Respondents were largely traditionally enrolled students (89.7%), with relatively even representation across academic years. Breaking accuracy down by discipline, Environmental Studies and Public Affairs scored highest at 76% and 74%, while Social Sciences and Humanities trailed closer to 56-57%. The breadth of that spread tells us sustainability literacy is genuinely uneven across campus. The uneven distribution of knowledge suggests targeted communications could be impactful to increase sustainability literacy among different student populations.

There was little variation across academic years for sustainability literacy.. This indicates that students commonly did not increase their sustainability knowledge throughout their years at UCLA. However, traditional students attending UCLA for four years tended to score higher than transfer students attending for a shorter amount of time. The survey also revealed a connection between sustainability knowledge and individual environmental behaviors. Our finding about students understanding plastic waste - more likely to use reusable water bottles, but not necessarily take part in the UCLA reusable container programs - suggests that sustainability literacy may influence simple individual behaviors more than system-based action. The gap between awareness and participation may reflect barriers such as convenience, accessibility or campus culture.

While sustainability literacy varied across academic majors, many students struggled with questions related to UCLA's own sustainability initiatives. Many respondents were unaware

of UCLA's Single Use Plastic Policy and the university's reliance on a campus power plant. This suggests that awareness of campus sustainability efforts remains limited and highlights the need for better communication and outreach by UCLA Sustainability.

Future directions from this work include executing a full campuswide survey with support from UCLA Deans, increasing participation by sharing the survey through the MyUCLA portal, and requiring compliance. This process would follow a similar format as the existing required training for all new students, including those on Title IX and other required materials. Repeating this survey in future years can provide longitudinal data about how sustainability knowledge has evolved on campus over time. Even without a formal communication channel, unstructured outreach can be an opportunity to study where students get their information. Surveying platforms like Qualtrics have built-in tools to measure how an individual accessed a survey depending on which link they clicked on. Using different links in different communication channels can provide additional data on which information sources are the most popular. Additional focus groups and surveying can also reveal the specific sources from which students get their information. Finally, while this project focused on sustainability knowledge, future surveys can also study sustainability culture in more depth—helping UCLA Sustainability understand the motivations behind, and barriers regarding, student sustainability behaviors.

Appendix A: Template Interview Questions

1. Tell us a bit about your role.
2. What work did you do on the STARS report?
 - a. Could you tell us more about your system for measuring sustainability literacy and why you used this measure?
 - b. How did you differentiate sustainability literacy and culture?
 - c. What kinds of questions did you use to measure sustainability literacy?
 - d. What platform did you use?
 - e. How did you get students engaged? Were you able to target disengaged students?
 - f. Were you involved in crafting any interventions to increase sustainability literacy?
 - g. What were your project's goals?
 - h. What were some challenges with your survey design? Do you have advice for overcoming these challenges?
3. How were your findings applied?
4. Did you work on any surveys that engaged staff/faculty?
5. How do you plan to increase sustainability literacy? Any interventions involving mass communications?
6. Were there any partners that would be helpful to work with, or you were unable to work with?
 - a. Which departments were involved in this section of the STARS report?

Appendix B: Final Survey Questions

Section 1: Demographic Questions

1. What academic year are you in at UCLA?
 - a. 1st year traditional
 - b. 2nd year traditional
 - c. 3rd year traditional
 - d. 4th year traditional
 - e. 1st year transfer / 3rd year
 - f. 2nd year transfer / 4th year
 - g. Other: _____
2. What is your UCLA major(s)? (Please write out all acronyms.)
3. If applicable, what is your UCLA minor(s)? (Please write out all acronyms.)

Section 2: Sustainability Literacy

1. What does a carbon footprint measure?
 - a. **Total greenhouse gasses emitted directly and indirectly by human activities**
 - b. Carbon created by human footprints
 - c. The size of the carbon chain in a given quantity of gasoline
 - d. The amount of toxins released by cattle
 - e. I don't know

2. Greenwashing refers to...
 - a. Cleaning items with eco-friendly detergents
 - b. Using green to advertise products effectively
 - c. A positive method corporations use to show their products are moving towards eco-solutions
 - d. A manipulative method corporations use to convince consumers that they or their products have a neutral or positive impact on the environment**
 - e. I don't know

3. Why does climate change disproportionately impact low income individuals?
 - a. Low-income individuals often rely on traditional, basic lifestyles which enhances climate-related disruptions.
 - b. Low-income individuals are better equipped to handle extreme weather events due to their resilience and the abundance of entry level job opportunities
 - c. People earning a low income are more likely to live in areas threatened by extreme weather events and have fewer resources to rebuild or relocate**
 - d. Climate change affects everyone equally, regardless of income level or access to resources.
 - e. I don't know

4. Which of the following is the best example of environmental justice?
- a. Urban citizens win a bill to have toxic wastes taken to rural communities
 - b. Government dams a river, flooding Native American tribal lands to create hydro-power for large cities
 - c. **Members of an Native American Tribal Council are involved in setting a quota for the amount of wood can be taken from a protected forest next to their village**
 - d. Multinational corporations build factories in developing countries where environmental laws are less strict
 - e. I don't know
5. What is one reason that buying locally-sourced products from small businesses is more sustainable than buying items imported from far away?
- a. **Less energy and emissions are used to transport the items**
 - b. Locally-sourced products are always cheaper than imported products, which makes them more sustainable
 - c. Small businesses produce goods in larger quantities, reducing the environmental impact per item
 - d. Imported products contribute less to climate change because international shipping uses renewable energy
 - e. I don't know

6. What does the term 'greenhouse gas effect' mean?
- a. An increase in backyard gardening
 - b. The degradation and predicted total loss of the ozone layer as a result of increased levels of carbon dioxide
 - c. The releasing of particulate-filled fossil fuel emissions into the air
 - d. The trapping of the sun's radiation in the atmosphere by gasses, raising atmospheric temperature**
 - e. I don't know
7. What is the most common cause of pollution of streams and rivers in North America?
- a. Dumping of garbage by cities
 - b. Surface water running off of yards, city streets, paved lots, and farm fields**
 - c. Litter near streams and rivers
 - d. Waste dumped by factories
 - e. I don't know
8. Which of the following is the most commonly used definition of sustainable development?
- a. Creating a government welfare system that ensures universal access to education, health care, and social services
 - b. Building a neighborhood that is both socio-demographically and economically diverse

- c. **Meeting the needs of the present without compromising the ability of future generations to meet their own needs**
 - d. Setting aside resources for preservation, never to be used
 - e. I don't know
9. What is UCLA's policy on single-use plastics?
- a. **No single-use plastics may be sold or distributed at UCLA stores and events**
 - b. Official UCLA entities are not permitted to sell or distribute single-use plastics (excluding student organizations or ASCULA-operated locations)
 - c. UCLA aims to reduce 50% of its single-use plastic consumption by 2030
 - d. The policy varies by department
 - e. I don't know
10. Where does UCLA source the majority of its energy from?
- a. The Los Angeles Department of Water and Power (LADWP)
 - b. Solar panels on UCLA campus
 - c. **UCLA's on-campus power plant**
 - d. A privately-owned hydroelectric power facility
 - e. I don't know

Section 3: Sustainability Culture/Policy Awareness

1. Which of the following sustainability goals or initiatives at UCLA are you aware of?

(Select all that apply)

- ☐ Goal to divert 90% of waste from landfills
- ☐ Obtain 100% clean electricity and reach climate neutrality
- ☐ Sustainable/plant-forward dining initiatives
- ☐ Water conservation through drought-tolerant landscaping
- ☐ Achieve a carbon neutral campus vehicle fleet
- ☐ Enhancing pollinator habitats on campus
- ☐ I was not aware of any of these

2. *Which of the following strategies to reduce/properly dispose of waste do you regularly use?*

- ☐ Use reusable containers available at ASUCLA restaurants (Greenhouse, Northern Lights, etc.)
- ☐ Closely look at waste signage on receptacle bins about how to sort items
- ☐ Carry a reusable water bottle
- ☐ Take single use items (cutlery, bottles, condiments / sweeteners) only as needed
- ☐ Saving leftovers to finish later
- ☐ Being mindful about how much food you order/take before getting more
- ☐ Other:_____

3. How do you usually get rid of unwanted personal items (e.g. clothes, furniture, decorations or electronics) that are still in good condition? Choose the **two** options you are most likely to do.

- ☐ Post online for sale
- ☐ Put outside for free or in the trash
- ☐ Give away to a friend
- ☐ Donate or swap
- ☐ Other: ____

4. To what extent do you agree with the following statement:

UCLA fosters a campus culture where sustainability is a shared responsibility among students, faculty and staff.

- a. Strongly Disagree
- b. Disagree
- c. Neither Agree nor Disagree
- d. Agree
- e. Strongly Agree

5. How confident do you feel in your ability to make environmentally-friendly choices at UCLA (i.e. waste sorting, transportation, dining, energy use)?

- a. Not at all confident
- b. Slightly confident
- c. Moderately confident
- d. Very confident
- e. Extremely confident

Appendix C: Brochure of Final Recommendations

UCLA Sustainability | **stars**
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2026

STAKEHOLDER:
CHRISTOPHE LABELLE,
SUSTAINABILITY ANALYST

UCLA MASS COMMUNICATIONS *RECOMMENDATIONS*

TARGETED AND EVIDENCE-BASED COMMUNICATION
RECOMMENDATIONS FOR UCLA SUSTAINABILITY BASED ON
STUDENT FOCUS GROUPS AND A SURVEY ON MEDIA AND
SUSTAINABILITY LITERACY.

TEAM LEADS: MARIO MORENO & TIFFANY LIEU
TEAM MEMBERS: BARIA ALASWAD, JUSTINE LIM, MACK LYONS,
OLIVIA TEICH, & GRAYSON SCIACQUA

STARS & MEDIA LITERACY – SAR 2026

RECOMMENDATIONS

01. Partner with Academic Departments and Student Organizations.

Connect with student-oriented, student-led organizations to distribute sustainability messaging. Tailor content to the interests of specific fields (e.g., engineering, social sciences, culture) to increase relevance and engagement.

02. Increase Knowledge & Engagement with UCLA Initiatives.

Develop a mandatory 'Sustainability' training for students, faculty, and staff. Create dedicated, reoccurring communication focusing on UCLA's own sustainability programs and link these to everyday campus life.

03. Prioritize Trending, Active, and Research-Based Content.

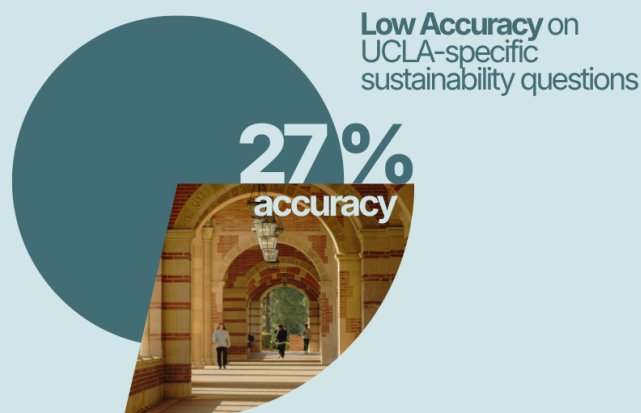
Maintain a presence on social media with content popular with students (Tiktok, Instagram Reels). Frame communications around data and outcomes with numbers and data to emphasize its impact in an accessible and engaging format.

04. Deploy Communications Around Academic Calendar.

Schedule major communications campaigns strategically at the start of Fall, Winter, and Spring quarters, and during breaks, when habits and routines are being established and to ensure they are being seen.



While sustainability literacy varied across academic majors, we found that students overall struggled with questions related to **UCLA's own sustainability initiatives**, supporting the need for better communication and outreach efforts.



KEY FINDINGS

★ Localized Channels

Students receive information primarily through major-specific channels, clubs, and peers.

★ Low Program Awareness

Only a minority of students could identify UCLA's single-use plastic policy or its reliance on power plants.

★ High Interest in Impact

Students are most receptive to novel, research-based content showing real-world and campus-level impact.

★ Knowledge-Action Gap

Broad sustainability knowledge influences individual habits but not UCLA program participation.

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