# **Green Orientation**

**Action Research Team** 

A project for the Education for Sustainable Living Program & the Institute of the Environment

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Ryan Mullen, Action Research Team Co-Director
Anna Reutinger, Graphic Designer for Green Guide to Life

#### Overview/Objectives/Project Goals

As UCLA strives to be a more sustainable campus, we see a disconnect with the university's goals and student involvement. Too few students are truly invested in the sustainable movement at UCLA, specifically because there is a lack of understanding on how to live an eco-friendly lifestyle. Our objective was to promote sustainability through an integrated education model, while simultaneously showing how it is a vital aspect of UCLA culture. Project goals included creating a Green Guide to Life for all UCLA students, designing and distributing reusable water bottles as prizes during orientation, staffing and creating a student sustainability table at the activities fair during orientation sessions, altering the orientation campus tour script to highlight UCLA's sustainable landmarks, setting up a volunteer project to promote sustainable service and creating table tents which provide information on how to eat sustainably in the dining halls.

As mentioned, one part of this project was designing reusable water bottles that the incoming freshman would see and potentially use in the future. The goal of this project was also to give incoming students a plausible and easy way to incorporate sustainable habits into their everyday lives. The water bottles are made of aluminum, a relatively sustainable material, and have a 'green' slogan. Our idea was to have all the orientation counselors use the bottles during orientation to set a sustainable example. We will also be giving out the water bottles as prizes during orientation, in hopes that the students will use them throughout their time at UCLA, and in turn reduce their carbon footprint.

Another one of the ways we intended to target the incoming students was to have an ESLP table at the freshman orientation activities fair. The activities fair will be on the first day of

orientation from 5-7pm. During this time, there will be two ESLP students volunteering their time. At the table, incoming students will play a "waste sort" game involving trash components that they will likely have while living in the dorms. They will separate the trash into recycling, composting and waste. Those students who get everything sorted correctly will win a reusable water bottle funded by TGIF. Furthermore, they will be able to sign up to be on the ESLP email list serve and potentially receive a copy of the "Green Guide to Life at UCLA." This table is supposed to be a fun way to educate students about being more sustainable in the dorms while at the same time exposing them to the ESLP series.

We amended the campus tour to highlight ways UCLA is being more sustainable so that students know how they can contribute to the sustainability movement. In the new tour, orientation counselors will point out locations of recycling bins, locations for recycling batteries, LEED certified buildings, organic eateries, and other green landmarks. This is a subtle way to show students how important being sustainable is at UCLA.

The purpose of the Carbon Footprint Pyramid is to act as an easy guide for having a low carbon footprint diet. Every food has a history for how it was grown, processed, and delivered. Some food requires more work than others and this leads to more energy spent, more waste products, and thus, more pollution. Therefore, there is great importance in creating your diet not only for yourself but also for your environment. The Carbon Footprint Pyramid is to be used as a "table tent," which will be set up on tables at the various UCLA dining halls on the hill. The ideal objective is for it to grab the attention of students who are eating their breakfast, lunch, or dinner, and educate them on ways to eat more sustainably. By following the simple guidelines offered by the pyramid, students will be able to easily stay away from foods that

contribute to a high carbon footprint. At the very least, they will be able to modify their diets to accommodate more of the low carbon footprint foods.

We intended to integrate an eco-conscious volunteer project into volunteer day in order to increase environmental concern among incoming students while still emphasizing the vitality of community service. Incoming students come from a variety of backgrounds and all have varying knowledge of current environmental conditions and problems. We hoped to partner with the UCLA Volunteer center on their volunteer day, September 19, 2010, to set up a project to better the environment.

### Significance/Background/Current Policies

Last year, the leaders of our team participated in Ryan Mullen and Spencer Hill's Green Living Project on Composting. The goal of the project was to divert waste by having students compost and recycle their waste rather than trashing it. Though we provided some signs and general information about how to separate trash, the majority of students continued placing all of their waste into the trash bin, instead of the composting or recycling bins. The general lack of knowledge and past experience with waste sorting led to a lack of concern and effort. We therefore sought to create a project which would educate incoming students (See Figure 1). We debated about whether the education should take place during orientation, welcome week, throughout the year, or some combination of the aforementioned. We eventually decided that the summer orientation sessions would be the easiest way to provide students with information because it is the most structured setting where students are together the most. Nurit Katz, one of our stakeholders, suggested that we create a Green Guide to Life for UCLA, similar to the one created by Pomona College for its students. We adopted her proposal

immediately, and went to work researching and creating our own version (See Figures 5, 6, 7). We were initially going to distribute the Green Guide at orientation, but then decided that students would likely either bring it home with them after orientation or throw it away at orientation, which would mean the guide would never make it back to their rooms in fall. We therefore decided that placing the guide on students' desks upon move in would be the ideal method for maximum usage. When we presented the idea to Robert Gilbert and Rob Kadota, they both agreed that this would be the best means of distribution, and ensured us that the guides would be part of students welcome packs.

We decided to distribute water bottles as prizes when, after hours of surveying students, we found that students preferred water bottles to any other form of sustainable product. We also decided that water bottles would be an appropriate means of encouraging sustainability because water preservation and waste reduction are such important issues at UCLA. Because plastic water bottles are a large contributor to waste at UCLA and are also not cost effective, we decided that giving out water bottles to students would cut down waste and save students' money. For the project, we worked with the orientation coordinator, Roxanne Neal, who educated us on the typical programming of orientation. With that information, we figured out the best times to give out our water bottles was at the activities fair that occurred during each session, so that all the students had an equal opportunity to win a water bottle.

In our survey, we also found that incoming students either did not understand how to be sustainable or that students who knew how to be sustainable didn't know how to maximize the facilities at UCLA while doing so. Furthermore, a specific conclusion that we made was that students wanted more hands on activities at orientation (See Figure 2). We determined that

one very effective (and fun) way to educate students was to let them partake in a game during the activities fair rather than lecture them. This game evolved into the "waste sort" game that will be monitored by the ESLP volunteers.

On the community service day organized by the volunteer center, incoming students are engaged in projects throughout Los Angeles in order to give back to the community. Each student is assigned to one of seven or eight projects ranging from school beautification to planting at Griffith Park. We hoped to suggest a project that the volunteer center would implement that focused on being sustainable.

The idea that the carbon footprint of one's diet has an effect on the environment is not as widespread as it should be. There is a good emphasis on modifying transportation methods and identifying how to recycle but the general idea of food's effect on the environment has been limited to what not to eat, with "Beefless Thursdays" at the dining halls. There is no regard to a guideline of what foods will have a less harmful effect. This Carbon Footprint Pyramid introduces the idea of quantifying the effect of one's diet on the environment, offering a more interactive way to understand how food plays into sustainability.

#### **Initial Conditions**

UCLA is in the process of incorporating sustainability into its culture, but there is a long way to go. Though they have certain mechanisms in place to improve sustainability, such as recycling bins in the residence halls and around campus, there is a noted lack of education about how to effectively utilize resources. When students move into the residence halls, there are many opportunities for them to be more sustainable. There are recycling bins in every dorm room, composting bins around campus, organic items for sale everywhere, Zip Cars,

public transportation, environmental groups, and even majors and minors specifically about the environment. Some signage exists in the dorms on how to properly dispose of waste, but there is little to no information on how to be sustainable in other ways. Information regarding the responsible usage of electricity and water is not readily available to students. Dining halls do not openly advise students on how to waste less. Bringing one's own bag to campus shops and utilizing reusable water bottles and thermoses is not marketed. While UCLA has the means to promote such sustainable living, it is not currently undertaking a program to spread the world.

Starting Fall of 2010, UCLA provided all incoming freshmen living in the residence halls reusable water bottles. We thought that by giving all of the orientation counselors and some of the freshman reusable water bottles would encourage other students to purchase and use water bottles early on. Further our unique design will make them more appealing (See Figure 4).

After deciding that an activities fair table was a potentially viable course of action to improve student sustainability, we proceeded to organize it. At no point has there ever been a table representing ESLP at summer orientation sessions.

The campus tour at orientation is very lengthy, but lacks any information regarding UCLA's sustainability or how to be sustainable currently.

Aside from the residential halls, the dining halls are a very popular communal spot on the hill for students to meet and interact. This makes them a key spot to place advertisements and educational information. Table tents are being used to get students informed about upcoming events and to help students create better eating habits. They are placed on every table in the dinging halls and the pamphlets they contain are replaced on a regular basis to

allow for updated information to get to the students. The idea for the Carbon Footprint Pyramid to be placed in the table tent rotation was to target students who have an opportunity to modify their diets, and the dining halls provide the perfect environment for this.

Last year the volunteer day sent more than 4,600 incoming students to Griffith Park, Point Dume beach, Veterans Administration Hospital, Gompers Middle School in South Los Angeles, University High School in West Los Angeles, Contreras High School, Gratts Elementary School in downtown Los Angeles, and Kester Elementary School in Sherman Oaks. The only environmentally conscious projects were located at the Point Dume cleanup and Griffith Park. We thought that for the coming year it would be beneficial to increase the number of environmental volunteer projects.

#### **Research Methodology**

In conducting our research for the Green Guide, we looked at "Green Guides" from other schools to see what kind of information they felt was important to give out to students. The Pomona Green Guide was very thorough but a bit too detailed and technical for what we envisioned. We interviewed different freshmen regarding their opinion on summer orientation and UCLA, gauging what kinds of sustainable practices they noticed UCLA was taking part in as well as where UCLA might be lacking. The majority of the students we interviewed could not recall a single aspect of sustainable education from orientation (See Figure 1).

All teams members contributed to the information presented in the Green Guide.

Different sections of the guide were assigned to all members, and they conducted research independently. The Internet was the primary source of information for the Green Guide.

Members also provided some personal information regarding their experience with living sustainably in order to ensure a peer-to-peer vibe.

We also conducted a survey regarding UCLA sustainability and summer orientation. Nearly 300 freshmen and sophomores completed the survey, proving to us that orientation did not focus on any aspects of sustainability and that students overwhelmingly wanted reusable water bottles as prizes (See Figure 1, 4). Further, many students would probably utilize a Green Guide to Life at UCLA if it was approachable and easy to read. Using this information, we strove to make our guide colloquial and student-friendly.

Using the survey results, we established that water bottles would be the best product to give to students and counselors to encourage sustainability. Research for designing and purchasing the water bottles was mainly conducted by talking with Gorilla Marketing. After looking at a variety of materials and designs provided by Gorilla Marketing, we decided on an aluminum 24 oz. water bottle.

We researched information to include in the orientation tour by walking around campus and taking note of sustainable landmarks. We also used UCLA's sustainability walking map to learn and incorporate information into the tour script.

Once it was determined that the activities fair table was to be set up, we allocated about 7 weeks to organize everything. The first step was a meeting with Roxanne Neal, director of UCLA New Student and Transition Programs. Here it was determined that ESLP would be given a table spot for each of the 10 sessions. Next, we met with Nurit Katz the Sustainability Coordinator. We were able to discuss the purpose of the table and how we would achieve our goals. At this meeting we decided to have the students join the ESLP email list and have them

fill out an online survey to be more sustainable. Also, we decided that the table would be the best place to give the reusable water bottles bought using TGIF funding. The next step was to make the table official. Raj attended a meeting held by Ivy Euben and proceeded to fill out the table application which was due May 21st. Once the table was finalized, our team created the waste sort game. In addition, an email was sent to everyone in ESLP asking for students to volunteer their time at the table. Eight students are able to help ESLP this summer by being at the activities fair table. A schedule has been made and each person knows what dates they will be present and what they will need to do in terms of set up, clean up, as well as what they will need to say to students during the fair. Nurit Katz will also be having a table at the fair so she will be present to oversee the ESLP table and make sure that everything runs smoothly. We have scheduled Jenna and David, two of the team members, to be at the first 2 sessions so that this table can start well and maximize its potential effectiveness.

The research required to complete the table tents involved an extensive review of the meals offered by the dining halls on campus so they could then be analyzed and their carbon footprints calculated. The tool used to calculate their carbon footprint came from a website offered by the Bon Appétit Management Company. The website provided the scale for each food item and allowed for the creation of various meals by adding food items together. The resulting carbon footprint was used to allocate a meal to a low, medium, or high carbon footprint section of the pyramid.

We approached the volunteer coordinator at UCLA, Antoinette Mongelli, for suggestions and approval for the volunteer project we were establishing in the Santa Monica Mountains (SMM). We came about the idea of the river cleanup by chance when Edwin Mackenzie

happened to meet Mike Malone from the SMM National Recreation Area. After this encounter we pursued the topic looking into the previous environmental projects undertaken by UCLA and others looking through Google for other projects that had been beneficial to the environment.

#### **Data/Cost Analysis**

We used Survey Monkey, an online site that allows you to create your own survey, to gather responses from freshman and sophomore students about their sustainability habits and preferences. We created a 19-question survey, and asked students to take it outside of DeNeve Dining hall for two hours a day for six days. We also created a Facebook event, and invited students to join it and take the survey. After two weeks of surveying in the dining hall and having the survey posted on Facebook for 3 weeks, we accumulated 298 responses in total. Survey Monkey groups and analyzes responses automatically, which made it very easy to interpret and do our own analysis on the responses.

In order to use Survey Monkey's service, we had to pay \$60, which was funded by TGIF.

UCLA Housing and Hospitality is providing the funding to print out the Carbon footprint Pyramid as a table tent. The water bottles are funded by TGIF, the bins that will be used in the game were provided by Robert Gilbert, Housing and Hospitality Services Sustainability Coordinator, and the students at the table during the activities fair are volunteers.

## **Key Findings**

Our survey findings confirmed support for the projects we undertook (See Figures 1, 2, 3, 4).

The survey indicated both a need and desire for a Green Guide to Life at UCLA. 60% of students felt that UCLA had made a commitment to being more sustainable but could be doing a lot more. Further 56.7% of students surveyed thought that sustainability was important and

while they had some knowledge, they wanted more. Only 8.4% students were against receiving a Green Guide to Life at UCLA

We ultimately decided to distribute water bottles as prizes because 68.5% of what students wanted to receive as a prize during orientation was a reusable water bottle, according to our survey findings. After much research, we found that water bottles would cost about \$5 each. We decided that \$1000 would be sufficient funds to supply all the orientation counselors with water bottles, and give 10 students per session water bottles as prizes. As of now we are not sure of the overall effect of giving out water bottles to incoming students, but we hope that it will influence them to live a more sustainable life at UCLA. We also hope that giving water bottles to orientation counselors, as role models and leaders for incoming students, will show incoming students that UCLA students are eco-conscious, and that this is the norm.

In terms of the effectiveness of the table, the findings are "to be determined." However, we believe it will be positively received, as 56.4% of students wanted to participate in more hands-on activities at orientation (See Figure 2), according to our survey results. Support for the project by ESLP students was also immense, as there has been an abundance of student volunteers for the activities fair table.

All major findings regarding the carbon footprint pyramid were of the nature of foods and whether or not they had a detrimental effect on their environment. More processed foods have a higher carbon footprint. Inspired by the popular food pyramid, the Carbon Footprint Pyramid is split up into three sections. The top of the pyramid consists of foods that contribute a high carbon footprint, the middle section has foods with a medium carbon footprint, and the bottom has foods contributing the lowest carbon footprint. The boundary lines that separate

between the low, medium, and high carbon footprints are dictated by a scale that goes from 0 to 7500. The significance of these boundaries and this scale is to quantify the carbon footprint of food so that it can be made into a guideline for sustainable dieting.

Our initial idea for the volunteer project was to partner with the Santa Monica Mountains Conservancy to clean up creeks and streams in the local mountains after rains leave debris from the Simi Valley. The problem with this project is that it could not fit into our time constraints for volunteer day so we were unable to follow through. The second idea was an environmental awareness project at a local elementary or middle school. We missed the deadline for the topic suggestion for this project, however, and were unable to get it accepted by the volunteer committee.

#### Recommendations

We advise that UCLA continue to distribute the Green Guide to Life in years to come to ensure that all incoming students understand the UCLA culture of sustainability. If possible, it would be ideal if a survey could be given to all students living in the residence halls sometime during the year which inquires about the usefulness of the guide, as well as how often students referenced the guide. We feel this will be the best way to truly judge the guide's effectiveness. The survey should also ask questions about what students would like to see more and less of in the guide, so that it could potentially be improved for the following year.

We encourage UCLA to conduct more surveys regarding the effectiveness of giving students and orientation counselors reusable water bottles. Distributing reusable water bottles has the potential to greatly reduce waste on the UCLA campus. We advise that this waste reduction be monitored to ensure that giving students water bottles is a cost effective way to

reduce the waste created from plastic water bottles. We hope that UCLA will find a way to provide all incoming students with a reusable water bottle in order to further reduce campus waste and UCLA's impact on the environment.

We further hope that the sustainability/ESLP table at summer orientation sessions will be continued for following summer orientations. Since this is many students' first look at UCLA, we feel that it is important they see how our university supports sustainable habits. We also recommend the dining halls continue to utilize table tents promoting sustainable eating habits. We also recommend that Residence Assistants (RAs) in the residence halls implement more sustainability activities to keep students actively engaged in learning about how to live an ecoconscious life. This can be helped by giving out reusable water bottles and bags as prizes for different games. In regards to the UCLA volunteer center, we recommend more environmentally centered volunteer activities along with social ones. If volunteering is a vital aspect of the UCLA culture, sustainability should be, as well.

Based on our survey results, we recommend that UCLA Orientation promote more hands-on activities for students during summer. Further, we believe that it would be highly beneficial for UCLA to promote continued sustainability education through the Green Guide to Life at UCLA and other venues. Students overwhelmingly thought there was a lack of sustainable education at orientation and request more.

Finally, Housing and ORL should continue distributing reusable water bottles to incoming students as a free gift, considering they promote sustainable living and are also one of the top requested items from freshmen and sophomores. This act, coupled with selling less

one-time use water bottles around campus, would directly contribute to UCLA reaching its zero-waste goal in the upcoming years.

#### Conclusion

The Green Guide to Life is officially in the works. Anna Reutinger, our graphic designer, is working with the UCLA Marketing team to design the booklet. Each page will be unique and the booklet will most likely be printed mid summer, prior to orientation sessions. A "panel of experts," one might say, has reviewed the booklet and ensured that it was the right information in the right language for students. This panel includes representatives from sustainability committees on campus as well as ESLP leaders and those in charge of housing and ORL.

We are currently in the process of ordering the water bottles and are waiting on the final water bottle design. We will be distributing the water bottles during each orientation session in the hopes to teach incoming students that changing little habits, like using reusable water bottles instead of plastic water bottles, can make a huge difference on reducing UCLA's impact on the environment.

One of the many ways that we are achieving our goal of educating students is by implementing the first ever ESLP table at the freshman orientation activities fair. Through the waste sort game, an online survey, and distribution of the "Green Guide to Life" we hope to maximize the effectiveness of the table by exposing the new students to sustainable environmental practices. When they implement what they have learned, they can play an integral part in shifting UCLA to an environmentally friendly campus. Many changes must be made in our collaborative effort to change the status quo, but this integral change cannot be made without the students changing their waste practices. Hopefully this table can do its small

part in helping students learn about composting and recycling so that our movement to a fully sustainable campus can be realized.

The information we obtained for the orientation tour regarding UCLA's sustainability will be incorporated into the tours given at orientation sessions throughout the summer. This is much do to Roxanne Neal's overwhelming support and help with the idea.

The Eco-footprint Pyramid was for the purposes of creating more environmentally friendly diet habits for UCLA students at the dining hall. We hope it will have a great effect on incoming freshman students when they see it on their tables during orientation.

We were not successful in organizing a volunteer project due to the fact that the SMM NRA was unable to accommodate the project at the requested date. Our other options then came at the last minute and could not be processed in time. We have determined that students would be interested in participating in one such project for volunteer day and think the projects we explored would be good to develop in the future.

Overall, we are very pleased with our accomplishments and feel that we achieved our goals. However, we will have to wait and see how incoming students react to the changes we will incorporate at orientation. We will also have to gauge students' responses to and the effectiveness of the Green Guide come Fall 2010. We are confident that our efforts will successfully create a more sustainable culture at UCLA.

# Figures/Tables:

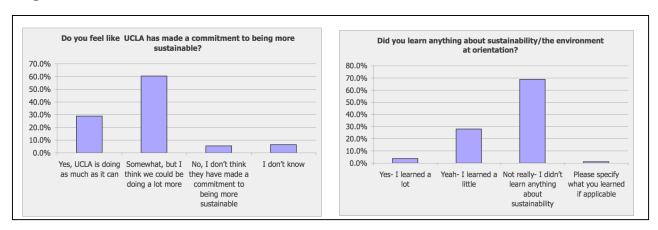


Figure 1: Survey results showing that while students see UCLA making the transition to being more sustainable, more could be done and students are willing to aid in that effort.

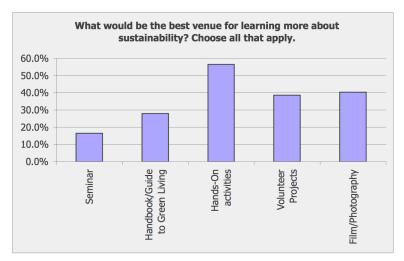


Figure 2: Students seek more hands on activities during Orientation.

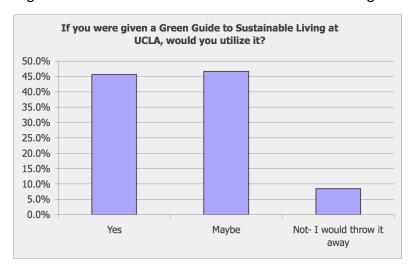


Figure 3: Students generally would not discard the Green Guide to Life

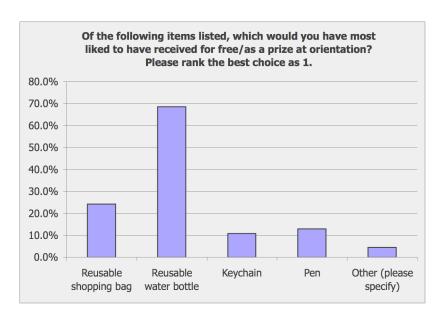


Figure 4: Most students desire a reusable water bottle as opposed to other prizes

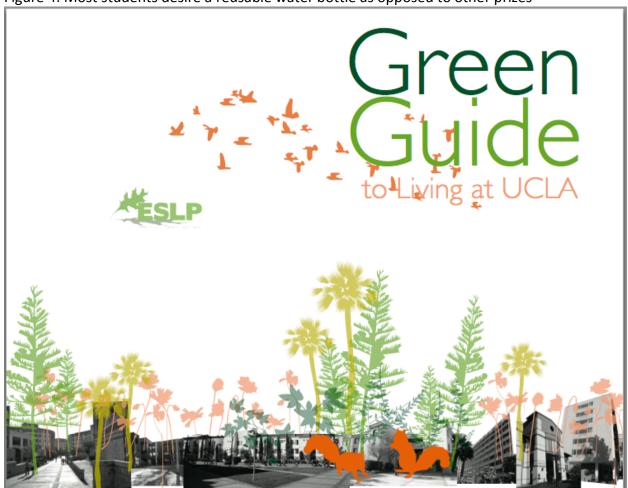


Figure 5: Draft of cover art for Green Guide to Life at UCLA

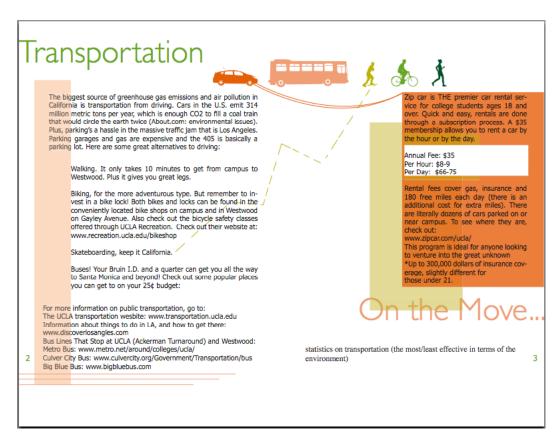


Figure 6: Example of content page in Green Guide



Figure 7: Example of content page in Green Guide (2)

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