

CSU Student Research Competition

A Comparative Study of Sustainability Awareness at CSU Channel Islands

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Introduction

California State University Channel Islands advertises to its students and staff that it is a *green* campus. By *green* the University refers to the sustainability practices on campus. Combining perspectives from the Communication and ESRM programs at CSU Channel Islands, this research project analyzes the overall effectiveness of the *Green Screen* initiative to raise student awareness of sustainability on campus as well as critique the general level of sustainability awareness. The results of the analysis are not only a research project, but serve as useful data for the *Green Screen* project as examination of student awareness helps the University better communicate its sustainable practices to students. Finally, because the project draws upon both Communication and ESRM, it helps increase the connection between these disciplines at CSU Channel Islands.

Methodology

To measure students' views and engagement, I collected surveys measuring students' awareness of sustainability initiatives on campus before and after the *Green Screen* initiative. The *Green Screens* goal was to have the first student run digital screen on campus that would focus solely on sustainability in an effort to raise student awareness. Having both a pre- and post-initiative survey data is necessary to determine whether the *Green Screen* outreach met its primary goal of raising students' sustainability awareness. Prior to the *Green Screen* initiative I collected 414 survey responses during the spring 2013 semester. The pre initiative survey asked students how important sustainable practices are to them, as well as their actual and desired involvement in sustainability practices. In addition to questions on sustainability, I also included a series of students. Following the *Green Screen* initiative, I collected 678 post-initiative surveys during the fall 2013 semester. The survey had the same questions as the pre-test, as well as

additional questions on awareness of the *Green Screen* itself. Comparing the pre- and post initiative survey results yields a quantitative measure of the change in sustainability awareness from the *Green Screen*.

In addition to these surveys, I also conducted focus groups with 13 commuter students and 11 on-campus housing students. Each focus group was with one type of student, and included five to eight students. The students freely shared any and all of their opinions regarding sustainability on campus, and also gave opinions on how to on how to increase student awareness of sustainability.

Finally, I conducted 100 recall tests among students recruited in the on-campus cafeteria. The recall tests were used to gather detailed information about how much information students retained from the *Green Screen* itself. The recall test asks students what they noticed on the screen, if they understood the information presented, and whether they knew what the goal of the screen was. I used these results to measure students' immediate, real time response to the screen.

Combining these different approaches allows for us to construct an overall picture of student awareness. The combination of results from multiple methods allows for a more complete measure of students' knowledge of on-campus sustainability, as each instrument concentrates on a different aspect of awareness. Of course, each approach has drawbacks. Most obviously, all three methods employ a convenience sample I conducted surveys in those classes where professors cooperated with my research design. As a result, I may over- or under- sample students from particular disciplines. The results, thus, may not be fully generalizable to the entire student body. That said, in order to achieve as representative a sample as possible, I contacted professors from all academic areas with equal probability to request their students' participation.

For the focus groups, I separated students by factor—commuting status—that may create important differences in responses.

I coded all data into SPSS to generate quantitative results, and conducted a series of correlations and comparisons of awareness pre- and post- initiative and by student characteristics. I analyzed the qualitative information in the focus groups as well, summarizing all patterns and information gathered. The recall tests were cross-referenced with the other methods in order to further identify patterns and validate results. The pre testing surveys conducted during the spring 2013 semester gave a base from which to measure awareness growth among the students. In fall 2013, I first conducted the surveys, followed by the recall tests and the focus groups. By structuring the data retrieval in that order I was able to verify that the methods were appropriate and would give valuable data. This proved beneficial as the original questions for the focus groups proved to no longer be effective. Based on the patterns found in the surveys and recall tests the focus groups were restructured so that they would focus on student needs.

Results

The initial results show that when students are asked how important sustainability is to the campus on a likert scale from 1 to 5 with 1 being the lowest, the answers are independent of their student standing. In the graph it is shown that the mean answer for all student regardless of standing are between 3.5 and 4.5 (Appendix Item A). There is no direct correlation between a student's standing and how much the student finds sustainability on campus important (Appendix Item B). This is an important result because it shows that students maintain the average amount of sustainability interest within their student standing, which means that most freshmen will be attracted to the same kind of information given.

The post-initiative surveys gave more generalizable results about the student population at Channel Islands. The most telling result is the various questions that referred to actual awareness of sustainable practices and activities on campus. When asked about their knowledge of sustainable activities on campus only 15% stated they were aware. Yet when asked to state the activities less than 10% of those aware gave answers related to sustainability. This shows that there is a very clear discrepancy between what sustainable practices occur and how many students are aware of such practices. As far as students perceptions are considered the student body did show a positive reaction on the issue of increasing and/or maintaining campus sustainability. When asked if the campus is efficient with energy use above 66% stated that the campus was at least somewhat efficient. The data show that students are mostly unhappy with the amount of equipment and lights that are left on at the campus, which demonstrates students' interest in energy efficiency. Most questions, from both the pre- and post- initiative surveys, that asked students about compost, recycling and available information gave results that show that students simply lack information about such topics.

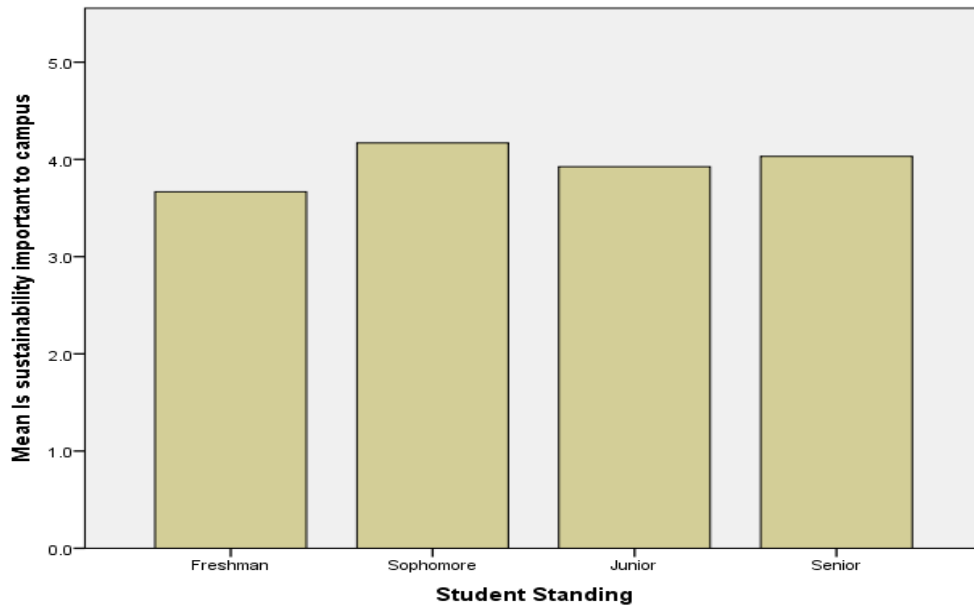
One interesting finding from the survey data is that students want more information in general, but indicate disinterest in current methods of receiving that information. This pattern was repeated by the focus groups since the students clearly stated their need for information but also stated indifference in regards to the current communication methods. The focus groups therefore provided additional evidence to the student's position in regards to channels of communication. The biggest pattern in the focus groups was that all students, whether they lived on- or off- campus, want students to work in collaboration with professors to create sustainability content for the digital screens. The focus group and recall data show that students have a positive perception on the use of digital screens for information dissemination. More evidence supported

this claim when considering the pre- and post- initiative surveys which showed a low to high positive correlation between finding the *Green Screen* informative and liking the *Green Screen* itself (Appendix Item C). Therefore, the students must find the screens informative and useful in order to have a positive perception of them.

In conclusion student sustainability awareness is very limited. The various correlations found have sufficient data in order to be viewed as an accurate measurement of the students. The largest problem found is a lack of communication among the administration and the student body. However the students show a significant amount of interest in the subject with the focus groups solidifying that students are ready and willing to take an active role with sustainability issues on campus. By connecting the survey answers, recall answers and focus group opinions it can be clearly noticed that the student body finds sustainability on campus to be an important issue yet lack basic information about it. Further and more in depth analysis of the pre- and post- initiative surveys answer more questions by specifically analyzing the correlations between class year, commuter status and interest level.

Appendix

Item A



Item B

Correlations

		Student Standing	Is sustainability important to campus
Student Standing	Pearson Correlation	1	.051
	Sig. (2-tailed)		.191
	N	662	659
Is sustainability important to campus	Pearson Correlation	.051	1
	Sig. (2-tailed)	.191	
	N	659	675

Item C

Correlations

		Do you like the Green Screen	Do you find the Green Screen informative
Do you like the Green Screen	Pearson Correlation	1	.691**
	Sig. (2-tailed)		.000
	N	71	71
Do you find the Green Screen informative	Pearson Correlation	.691**	1
	Sig. (2-tailed)	.000	
	N	71	71

** . Correlation is significant at the 0.01 level (2-tailed).