Attitudes Towards Climate Change and Sustainability

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Climate Change and the University of Richmond: Current Challenges and Future Directions. Earth Week, April 21-25, 2014

Poster produced for Environmental Studies/Geography and the Environment Senior Seminar

Introduction

The University of Richmond has made great strides as a community to decrease our carbon emissions and live in a more sustainable way. In November of 2007 President Ayers signed the American College and University Presidents Climate Commitment, which resolves Richmond to mitigate climate change. In response to this action, the Environmental Studies Senior Seminar of 2008 created a report outlining the view of our community about these issues, as well as, offer recommendations for our campus. We, the Environmental Studies Senior Seminar Class of 2014 have chosen to focus our capstone on climate change. We recognize that climate change is an imminent threat and that our community can make a difference in climate change mitigation. As a class, we have come to the conclusion that the key to prompting climate action on an individual and global scale is communication. We need to find the best way to communicate complex issues surrounding climate change to the general public. To that end, we chose to conduct another survey of the student body to assess student knowledge and concern regarding climate change and to determine how best to communicate with UR students. This particular project had three goals: 1) reissue the 2008 survey to see how UR's campus attitudes have changed 2) compare our data to other schools 3) recommend new programs and options addressing climate change to UR

Background

2008 Survey

The Senior Seminar Class of 2008 chose to conduct a survey of the student body to evaluate student awareness of climate change and how the level of awareness relates to behavior. The survey was sent out to the entire student body, 2,795 people at the time, and was taken by 301 students over a period of two weeks. Students were asked to answer 29 questions and were entered into a raffle for $50 after the completion of the survey. In addition, fifteen personal interviews were conducted related to the material in the survey. Participation was voluntary, and participants were selected in locations on campus based on availability and the appropriate conditions for conducting an interview. Interviews lasted about fifteen minutes and included similar questions to the survey with the additional follow up questions and requests for clarification. Based on the results of the survey, the class composed a report including thirteen recommendations for programs and initiatives for UR to implement. Of those thirteen recommendations, five have already been implemented since 2008.

Methods

The survey was sent to approximately half the undergraduate students via email. The sample of students was selected by last name-those whose last name begins with A-L. The total number of students who were sent the survey was 1,591. One follow-up email was sent out to all selected students over the course of a week. Over a period of fifteen days, 274 students completed the survey. The survey consisted of twenty-two questions. The first four questions established the subject's demographics and included gender, class year, major, and housing status. The next group of questions assessed the subject's attitudes towards and knowledge of climate change. The questions asked students whether they felt climate change was a major threat, what the consequences of global climate change are, whether global climate change is occurring due to human activity, and which activities they believed contributed to climate change. The next section addresses student concerns. The questions asked what concerned students the most of a list of topics and whether or not they believed the University should be doing more to reduce greenhouse gas emissions. The final section addressed the student's behaviors on campus. Questions dealt with students' electricity use, transportation habits, recycling, and concern about the health of the Westhampton lake. The content and methods of the survey were approved by the Institutional Review Board (IRB), which formally regulates research at the University of Richmond "as it pertains to the rights and welfare of human subjects." Survey and interview responses were confidential, and participant names were not connected to their responses.

Results

Based on the results of our survey, we found that the behaviors of University of Richmond have remained fairly consistent over the past six years. Awareness and knowledge regarding climate change has slightly increased, as seen in Figures 1 and 2. However, students do not seems to be altering their behavior and habits based on their awareness. This can be seen in Figure 3. Looking forward, we need to engage and educate our community in order to make necessary progress towards climate neutrality.

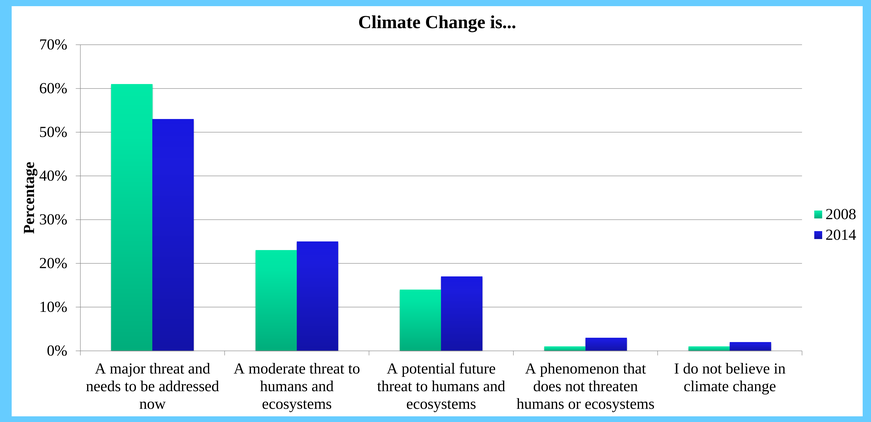

Figure 1. Student Responses to Question 5 in 2008 vs 2014

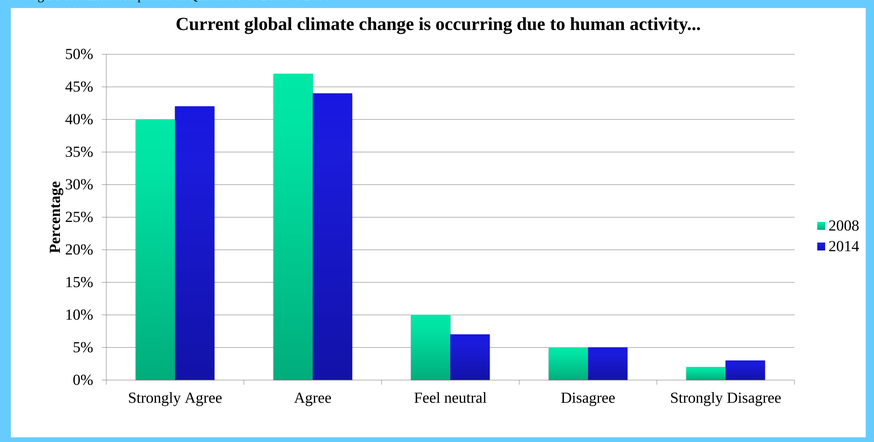

Figure 2. Student Responses to Question 7 in 2008 vs 2014

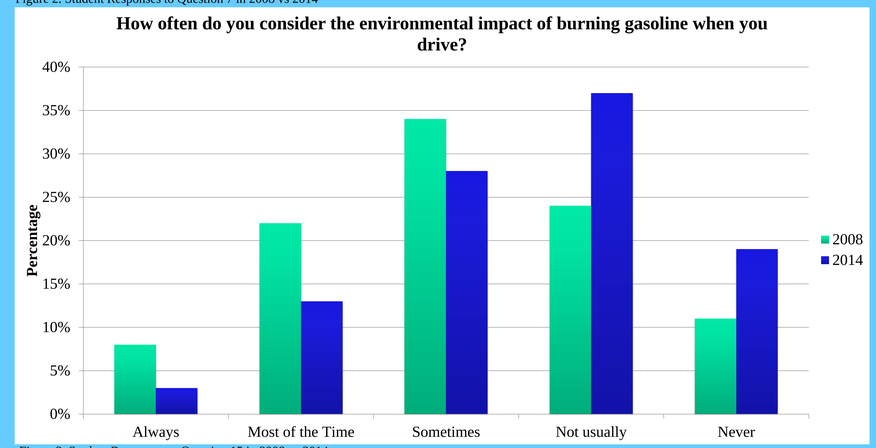

Figure 3. Student Responses to Question 15 in 2008 vs 2014

Recommendations

Transportation

Our research suggests that the Richmond community can improve on our transportation sector. William and Mary has a carbon offset program, which is run by their Committee on Sustainability. The carbon offset program has pledged that 100% of your carbon offset will go to energy reducing project on William and Mary's campus. As a part of this program a pay scale has been developed using other carbon offset websites. All of these funds are easily collected via William and Mary's website. If this plan was well advertised then this could become a viable program at Richmond. Another potential way to raise money for carbon offset investment is a mandatory student green fee. University of Maryland-College Park established a Student Sustainability Fee in 2007. At Maryland, the Student Sustainability Fee goes toward projects that reduce environmental impact or increase sustainability education and awareness on campus. At UR, a student green fund could work in one of two ways: a mandatory annual fee like that at Maryland, or a voluntary donation of any amount. Carpool incentives could also reduce carbon emissions from transportation. Under this system the cost of the parking permit goes down when a group of students or faculty come in together. The college also reserves parking spots for those who carpool adding that as an incentive. Another program that could be beneficial is creating a carpool for students who live off campus. These students typically live in or near the Horsepen apartments and have to drive to campus every day. If a carpool could be set up this could minimize carbon emissions from daily commuting. The other area where we could create a carpool network would be to facilitate rides home for break. The results of our survey indicated that only 10% of the student body utilizes carpooling as an option for returning home for break. In addition, many students indicated that they would be inclined to drive less if the campus loop were available all day. One way to increase the effectiveness was to find a way for the students to contact the campus loop to signal where the students were.

Waste

Although the majority of students indicated that they recycle on campus, other data suggests that the campus community can do more in terms of waste minimization. UR can improve our waste reduction efforts by adding an organic waste component to our current system. At American University, organic waste collection bins are placed alongside trash and recycling bins throughout campus and in residence halls and apartments. Their facilities staff then collects the organic waste and sent to an off site composting facility. In addition, food waste from campus dining facilities is collected and composted as well. Implementing organic waste collection on UR's campus would significantly reduce the amount of waste we send to landfills. Another way to reduce waste production and encourage recycling is to distribute individual recycling bins for residence hall rooms. Currently, every University Forest Apartment is supplied with a recycling bin that is filled and emptied into larger recycling dumpsters by the apartment residents. A similar system could be put into place in University residence halls. Each room would be supplied with a recycling receptacle which residents would be expected to empty into larger hall recycling bins on their own.

Education and Outreach

We believe that education in the Richmond community will play an important role in mitigating our campus' impact on climate change. First, as evidenced in the results of our survey students have not developed habits that promote conserving electricity. For the most part students do not unplug their power strips, unplug major appliances, or shut down computers when leaving for breaks. This is likely due to the fact that the student body is unaware of the difference that these simple actions can make. We recommend that these tips get posted on UR's website and goes on the housing "To Do Before You Leave" list. This would make the students more aware and could potentially reduce the electricity use on campus. Another part of environmental education should take place before the students even arrive on campus. For new students it should required that all appliances brought to campus are classified as energy star appliances. In addition the University should mandate that CFLs are the only light bulbs used by students. Duke University and William and Mary hand out CFLs on move in day to ensure that the student body is conserving electricity.

Acknowledgements

We would like to express our appreciation to Megan Zanella-Litke for her invaluable input and guidance. We would also like to thank each of the 274 anonymous University of Richmond students who took the time to complete our survey and made this project possible. Special thanks to our Senior Seminar professors Dr. Peter Smallwood and Dr. David Salisbury.

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