Implementing Climate Studies at a Small Diverse Jesuit NE University

Paul W. Bartlett, Saint Peter's University, Research Fellow AMS Climate Diversity Cohort pbartlett@saintpeters.edu AMS Annual Conference, 2015, Phoenix, Arizona. Poster

The American Meteorological Society's Higher Education Diversity project workshop is a great benefit for Saint Peter's University, a small Jesuit school of approximately 3,200 students. The Society of Jesus has prioritized ecology, global warming, and disaster resilience as integral to their mission of faith and justice. (Healing a Broken World, Alvarez, 2011). There are 28 Jesuit colleges and universities in the United States.

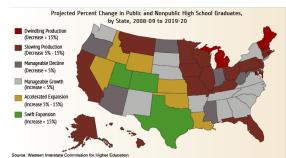
Saint Peter's University (SPU) President James N. Loughran, S.J. cofounded the New Jersey Higher Education Partnership for Sustainability in 1999. The University's Climate Action Plan was drafted under the initiative of the President's office and a Green Team



consisting of faculty and staff. Saint Peter's University (SPU) President Cornacchia signed the American College and University Presidents' Climate Commitment (ACUPCC) in 2008, and has made substantial progress reducing our carbon footprint with co-generation, solar panels, 100% wind power purchased energy, and a new prominent LEED Silver student center.

An environmental science minor was established by the biology department, and a vibrant student club, Students Against Violating Earth, S.A.V.E., is one of the outcomes. An environmental studies major was established through the leadership of the chair of the chemistry department, Dr. Patricia Redden., a participant in the 2013 AMS Diversity Project. The challenge is now to implement sustainability across the curriculum.

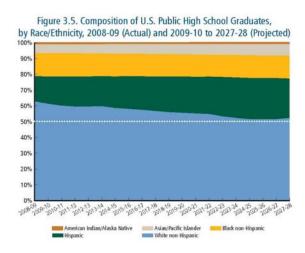
Demographic Trends & Fiscal Constraints a Challenge for New Climate Studies Courses & Programs. Fiscal and institutional constraints on expanding sustainability and climate courses offerings. While the brick and mortar side of Saint Peter's is enjoying the financial benefits of energy efficiency, the academic side has been hit by a decline in student financial well being



from the financial crisis and economic meltdown that began in late 2008, and a long term demographic trend of a projected decline of fifteen percent of the pool of graduating seniors in New Jersey in the near future, sharing a general declining trend in the Northeast (Prescott & Bransberger, Knocking at the College Door, 2012). Like many state governments facing loss of revenues, New Jersey State cut assistance to higher education, creating academic structural deficits.

At the same time, the freshman age population is shifting to a higher proportion of Hispanics.

Fortunately, Saint Peter's is well situated to attract this growing segment of the college age population. Saint Peter's was founded in 1872 as a Jesuit school, with a long tradition of attracting recent immigrants with a global perspective. Saint Peter's is a federally designated Hispanic-Serving Institution, was ranked third in ethnic diversity among comprehensive universities in the north by U.S. News and World Report (2008), and is a recognized Non-Governmental Organization at the United Nations. A diverse student body is more flexible and more global.



Fortunately, unlike many of our neighbors in New Jersey, freshman enrollment rebounded, and Saint Peter's new doctoral programs are growing. However, because of the wide spread practice of tuition discounting, the financial constraints of incoming freshman, and higher education cuts from the state, there remains an academic operating deficit, and pressure to reduce costs and consequently course offerings.

The **AMS Climate workshop** was valuable in a number or respects: the cohort approach of faculty with diverse populations, site visits to NOAA and NASA, site visit to a university climate research facility, discussion with guest speaker and sharing information among cohorts. Highlights include witnessing weather forecaster specialists work with data and make revisions, visiting weather and pollutant monitoring stations and discussions with technical staff, presentation of graduate students of meteorological and climate research.

Sustainability Council. The Saint Peter's Sustainability Council meets regularly, coordinating and promoting sustainability activities across campus. The Sustainability Council is presently promoting the AMS Climate Studies course to be offered in the Masters of Public and Business Administration Programs, the Continuing Education program, and the School of Education. The opportunity has renewed discussion of creating a Sustainability Certificate at Saint Peter's, with the AMS Climate Studies course as the core. We believe teaching the course in the Masters program of the School of Education will have the most impact, because of the multiplier effect to K-12 students.

We are attempting to be pro-active, by creating proposals for programmatic funding that will involve our minority students in climate and sustainability studies and action research. We believe sustainability and well being programming can have an additional benefit of attracting more female and minority students into the STEM disciplines, particularly if we are successful in implementing sustainability across the curriculum.

Mutual Support on campus and off campus is important to develop capacities and make systemic change. There is an alphabet soup of academic professional mutual support organizations and efforts including: AASHE STARS, ACUPCC, AMS, AERE EE SIG, ISEE, 2nd Nature, and NAAEE.



Knowledge Plus: Building an Ethic of Care for Others, Self & Nature. Building climate change awareness on campus, especially freshman in their first semester, is important for broader support for climate studies across the curriculum. Saint Peter's Social Justice and Honor's Programs sponsors an annual community garden event in early September as part of JC Fridays, a city-wide arts festival. This past fall the theme was "Peas & Justice: Preparing for the NYC Peoples Climate March." An AMS Diversity Project professor reported on weather variability and climate change events, students reported on an activist collaboration with a United Nations climate resilience program. Students fabricated a large puppet, designed by Marina Tsaplina, for the march that was featured in a photo by Michael Segar, Reuters news service and in the journal Foreign Affairs, providing students with the important sustainability learning objective: collective efficacy.

We run faculty capacity development workshops to incorporate sustainability content and learning outcomes (SLOs) and content in courses. AASHE, NAEEE and NJHEPS are helpful academic sustainability mutual support organizations. A recent NJHEPS workshop focused on developing SLOs for skills, attitudes, social norms and behavior; knowledge is not enough, we need graduates motivated and capable to make needed systemic change. Faculty, staff and students also need to develop interpersonal (social) and intrapersonal (emotional) capacity and intelligences and to experience individual and collective efficacy in order to become effective climate change leaders and to make systemic change.

Community service, service learning, and activism are opportunities for global warming and mitigation place based experiential learning radiating from the campus. Fortunately at Saint Peter's, we can build up from our Community Service program which was named to the 2014 President's Honor Roll for National and Community Service in all four eligibility categories.

References

Álvarez, Patxi SJ, Editor. (2011). Healing a Broken World: Special Report on Ecology, Promotio Iustitiae n° 106, 2011/2.

http://www.sjweb.info/sjs/PJnew

Kiley, Keven. (2012). The Pupil Cliff. Inside Higher Ed. January 11.

https://www.insidehighered.com/news/2013/01/11/wiche-report-highlights-decline-high-school-graduates-and-growing-diversity

McGrath, Matt. 2014. "Global group of Catholic bishops call for end to fossil fuels," BBC News, Lima. December 10th.

http://www.bbc.com/news/science-environment-30408022

Prescott, Brian T. and Bransberger, Peade. (2012). Knocking at the College Door: Projections of High School Graduates (8th edition). Boulder, CO: Western Interstate Commission for Higher Education. December.

http://www.wiche.edu/pub/knocking-8th-and-supplements

Russell, Constance L.& Bell, Anne C. A Politicized Ethic of Care: Environmental Education from an Ecofeminist Perspective. In: Women's Voices in Experiential Education, Warren, Karen, Ed. 172-182. Kendall Hunt Publishing. http://files.eric.ed.gov/fulltext/ED412046.pdf

Internet Resources & Links

AASHE Sustainability, Tracking, Assessment, Ranking System (STARS) https://stars.aashe.org/ AMS-Second Nature Climate Diversity Project

http://www.campusgreenbuilder.org/AMS-SecondNature

International Society for Ecological Economics http://www.isecoeco.org/

Eco-Jesuit http://www.ecojesuit.com

New Jersey Higher Education Partnership for Sustainability (NJHEPS) http://www.njheps.org

North American Association for Environmental Education http://www.naaee.net/

Second Nature http://www.secondnature.org/

To Tend the Earth, Climate Conference, Loyola U Chicago March 19-20, 2015 http://www.luc.edu/sustainability/initiatives/climatechangeconference/