

16 INTEGRATING SUSTAINABILITY ACROSS CURRICULUM WORKSHOPS FOR FACULTY

Nicolette E. Burtis

16.1 INTRODUCTION

When looking at the college experience as a whole, one of the most important aspects is the curriculum. Every student is affected by curriculum, because at its core the main reason for college is to obtain a degree and learn. It doesn't matter if you commute two times a week or live on campus everyone will take classes. Therefore, when auditing a university with regard to sustainability it is extremely important to take a deep look at curriculum and the different messages it is providing students that they will take with them past the point when they graduate.

Curriculum has many aspects. There are the programs that are available to students (majors and minors), the general education requirements, the external curriculum through school sponsored events and programs, trainings that take place out of the classroom, and the inclusion of topics throughout classes in all disciplines. For this chapter, incorporating sustainability throughout all disciplines is the focus.

It is important to teach and learn about sustainability because it addresses interdisciplinary topics, helps individuals develop skills in analyzing complex data, as well as understand how policy works to address these issues, and work to solve problems that are relevant to today's global society

16.1.1 Other Universities

Across the country, other universities have been implementing programs in order to incorporate sustainability throughout the curriculum. For example, the University of Pennsylvania has created an *Integrating Sustainability Across the Curriculum* (ISAC) Program, which teams up faculty members with a student researcher over the summer to help the professor integrate sustainability throughout their course syllabi, lectures, assignments, reading material, and tests. The student researcher also works with their faculty partner to refine an existing course or develop a new course that incorporates sustainability as an academic theme. Other schools with successful programs include the University of Vermont and the UC Schools. The University of Vermont (UVM) has implemented a Sustainability Faculty Fellows Program. This involves integrating interdisciplinary approaches to sustainability into the UVM curriculum. Fellows incorporate sustainability into catalogue-approved and special topic courses at all levels. The UC schools have Faculty Curriculum Workshops and Networking Events, which are a series of campus workshops, designed to incentivize, support, and connect faculty across campuses that voluntarily choose to infuse relevant climate change and sustainability concepts into existing course curriculum across various disciplines. Enriching existing courses in this way is very cost-effective and enhances the educational experience of many students, especially those for whom sustainability and climate may not be a major focus. Participating faculty will receive up to \$1,200 to incorporate sustainability and climate into existing curriculum.

In addition, within the list of Chapman’s “Aspiration Schools,” several of them are implementing programs to assist faculty in incorporating sustainability across disciplines. For example, Gonzaga has a Sustainability Across the Curriculum (SAC) program. Prior to implementing this, Gonzaga sent out a survey to all of its professors, and found that 31% of individuals have never taught any sustainability themes within their course (sustainability themes could be in the form of readings, assignments, activities, etc.), and 80% have never taught a course where sustainability is the core theme (Gonzaga, 2017). On the other end, 31% have also included sustainability within at least one course, and 12% have had sustainability as a core theme in one course. Gonzaga has several resources for faculty members to implement sustainability within their classes. For example The Ponderosa Project at Northern Arizona University (NAU) is an interdisciplinary faculty group effort to incorporate environmental sustainability issues into university courses with the ultimate goal of providing future citizens the education and skills necessary to achieve sustainable communities and societies.

16.2 HISTORY OF INTERDISCIPLINARY SUSTAINABILITY AT CHAPMAN

Chapman University 2013 Environmental Audit found that 95.3% of faculty or staff respondents felt it was either very or somewhat important for sustainability to be taught and promoted in higher education institutions.

16.2.1 AASHE

The Chapman University 2013 Environmental Audit mentions that Chapman should “incorporate these concepts [sustainability] into the curriculum of many diverse programs.” It also mentions the Association for the Advancement of Sustainability in Higher Education (AASHE), and says higher education should provide graduates with the skill set, knowledge, and habits of mind for them to prepare for challenges presented by climate change, loss of biodiversity, a world population of 9 billion in 2050, limited water resources, global health issues, and extreme poverty. Students must understand how the systems of which they are a part (social, economic, and ecological) function and are integrated. Curriculum must prepare learners for living sustainably, both professionally and personally. (AASHE, 2010).

Chapman University participated in the AASHE Sustainability Tracking, Assessment and Rating System program during the 2010/2011 catalog year, and was considered a “reporter.” In fact, Chapman was even recognized in the biannual newsletter for its inclusion of sustainability in Orientation Programming, but elected not to participate in subsequent years. This report was led by Justin Koppelman prior to the creation of the Department of Sustainability, and came out of Student Engagement.

16.2.2 Sustainability Across the Curriculum Teaching Grant Program

A relevant program that Chapman had in the past was the Sustainability Across the Curriculum Teaching Grant Program. Initiated in 2012 granting a total of \$6,500 (funded 6 classes, mostly in Schmid). It is important for inquiring global citizens to learn about the many challenges that our world is facing and to make connections between actions taken, how they affect our planet, and what needs to be done in order to promote a more sustainable society. By incorporating sustainability into the curriculum at Chapman, students will be exposed to these

concepts and become better prepared to use them later in life. In a the 2013 audit which also looked at ways in which faculty integrate sustainability into already existing course, 24.2% of those professors who responded to the survey (n=66) indicated that they already teach a course that includes sustainability in theory and/or practice. From business to social science to history, these classes include Imagining a Sustainable Future; Writing about Ecology; Environmental History of the American West; and Corporate Entrepreneurship Production and Operations Management.

Table 1: Examples of classes at Chapman that have incorporated sustainability in the past.

Discipline	Name of Class
FFC (College of Educational Studies)	Imagining a Sustainable Future
History	Environmental History of the American West
Business	Corporate Entrepreneurship Production and Operations Management.
English	Writing about Ecology
English	Ecopoetics Course
Business	Systems of Sustainable Development
Food Science	Sustainable Food Production
Sociology	Teaching Sustainability: A Case Study of Ecotourism in Patagonia

16.3 CURRENT STATUS OF INTERDISCIPLINARY SUSTAINABILITY

16.3.1 Faculty Incentives

The Award for Curriculum Innovation in Sustainability Education, which “Recognizes outstanding efforts to advance sustainability in and beyond the classroom,” is overseen by Dr. Al-Eskary, who is chair of the Faculty Research and Development Council (FDRC). This award is one of nine awards that are given out to full time faculty each year. For the Innovation in Sustainability Education award specifically, the Faculty Committee on Sustainability has a hand

in the award decision. This monetary award is available to any full-time faculty who wish to either incorporate sustainability into an existing class that they already teach, or create a new class. After a faculty member has applied and been chosen for this award, they are given \$500 to aid them in purchasing books, DVDs, and other equipment that will facilitate them in teaching their class.

16.3.2 AASHE

Chapman University is still a member of the Association for the Advancement of Sustainability in Higher Education, and has been since 2011.

However, Chapman has not elected to take part in STARS (Sustainability Tracking, Assessment & Rating System), which is a transparent, self-reporting framework for colleges and universities to measure their sustainability performance, since 2012 and has since expired.

16.3.2.a Survey Data

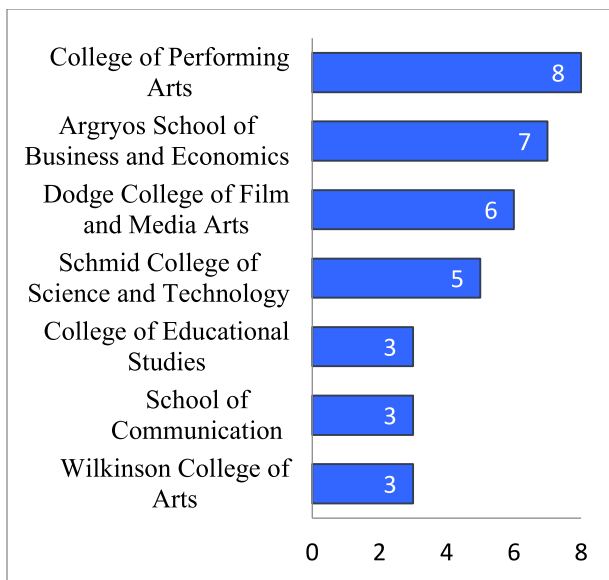


Figure 16.1 - The associated schools of faculty who completed the survey, this is included to show that the responses received came from varied disciplines

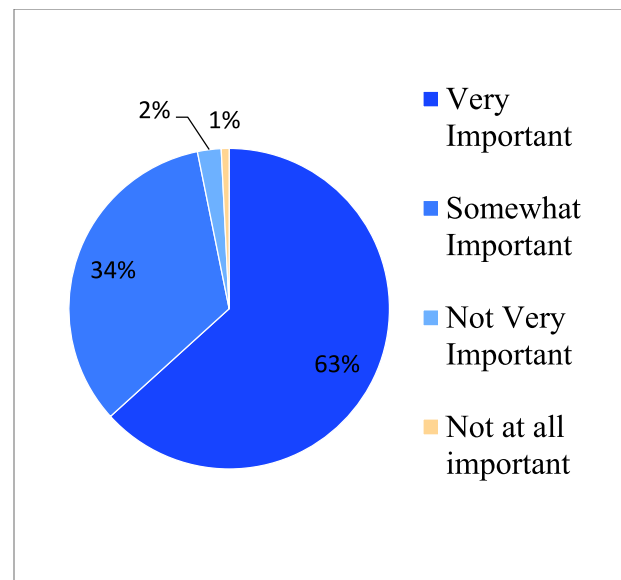


Figure 16.2 - Student responses to “In your opinion, how important is it that sustainability is taught?” As you can see a majority think that it is important that sustainability is taught.

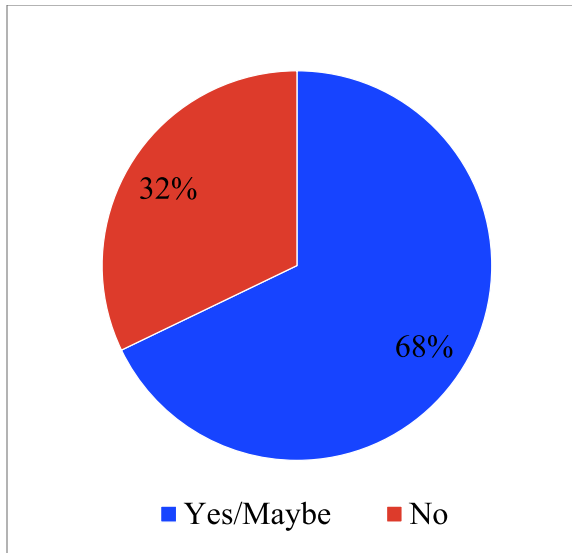


Figure 16.3 - Faculty that think attending a workshop would/could help them integrate sustainability. This data is important because it shows that faculty think for the most part that a workshop would be helpful.

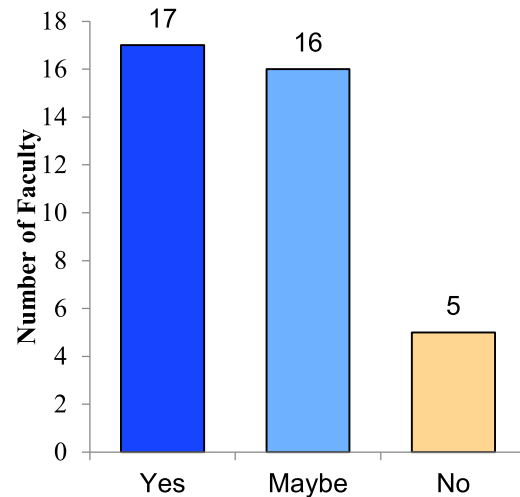


Figure 16.4 - Faculty interested in integrating sustainability into courses they currently teach, this is especially important because it shows that a lot of faculty are interested in integrating sustainability within their courses which would be the least intensive way of including more sustainability curriculum.

16.3.3 Similar Workshop Comparison

Chapman University has utilized the workshop style format for faculty with regard to several different aspects of the university. For example, Human Resources held a workshop on Peace, Justice, and Sustainability this year, which had 18 individuals, sign up with an additional 9 on the waitlist. The Office of Undergraduate Research also began holding workshops for faculty this year with the creation of a workshop to help faculty with writing letters of recommendation for students. Lastly, the Chapman Diversity Project has been holding Safe Space Training workshops for faculty, staff, and students since 2004.

Safe Space workshops aim to assist faculty, staff and administrators who wish to become identified allies on campus in exploring and increasing their own awareness and knowledge of the LGBTQIA community and its history. Participants will receive information on relevant definitions, terms, symbols, and experiences from LGBTQIA students about campus climate, identity development, ways to be a visible ally, and resources for the LGBTQIA and ally communities. This workshop impacts Chapman University through its commitment to creating a welcoming culture and environment for all LGBTQIA community members. In total, since its implementation in 2004, Safe Space Trainings have seen the attendance of 286 total individuals

Appendix 16.8.1.

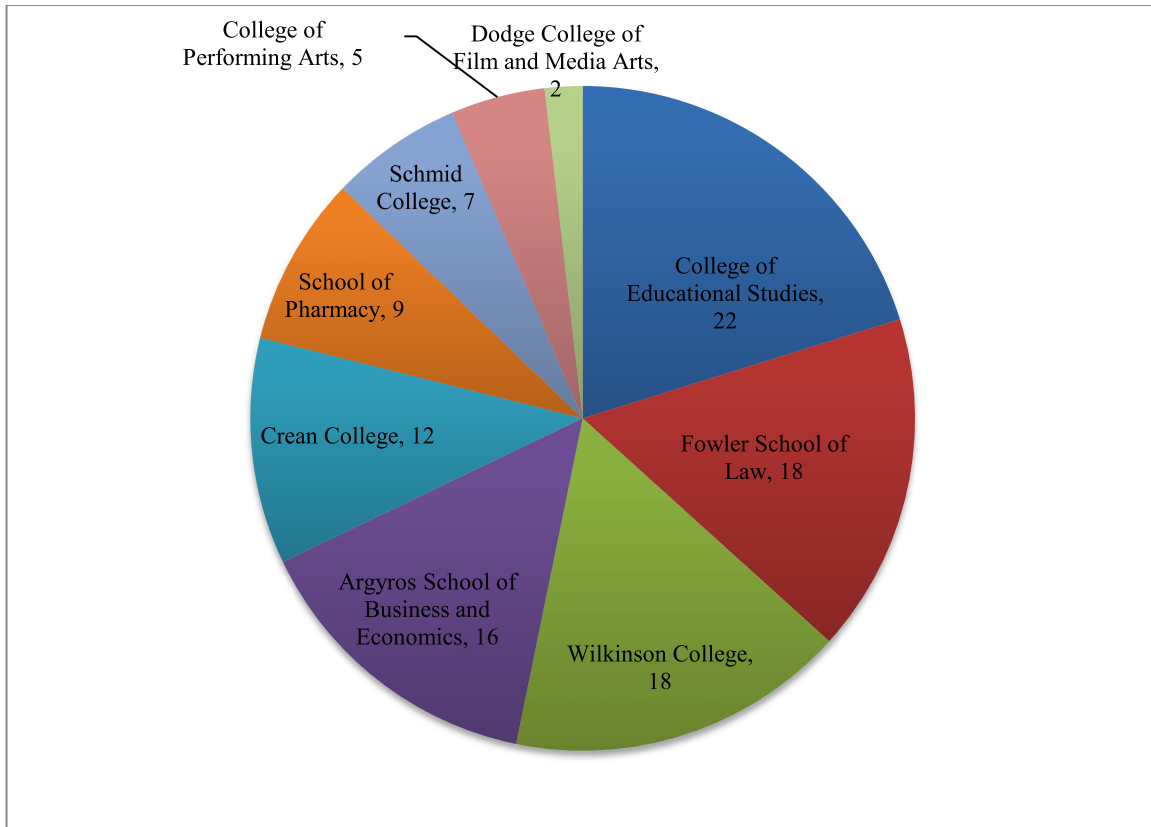


Figure 5 - Faculty attendance at Safe Space Workshops from 2004-2017, numbers by college.

16.4 CONCLUDING ASSESSMENTS ABOUT INTERDISCIPLINARY SUSTAINABILITY AT CHAPMAN

All in all, interdisciplinary sustainability at Chapman has had its ups and downs, but with the establishment of the department of sustainability as well as the continuation of faculty incentives, the time is right for a workshop on integrating sustainability across disciplines to come into existence.

Already many effective external programming and curriculum that reach students outside of Environmental Science program through Civic Engagement and the University Program Board.

Looking forward it is important to realize that sustainability is not an "add-on" content area; rather, sustainability is easy to integrate into already existing lessons as in-class examples of concepts and as a context for activities and problem sets. When teaching a core course concept, use sustainability-related examples. Add in every course, "How can you use what we are learning to make the world a better place?" Create a real world problem/solving project so students can help their communities become more environmentally sound and sustainable. Integrate these sustainability-related understandings into all learning objectives and assessments. Add sustainability-related learning outcomes into your course objectives

In the future Chapman should bring in faculty from other universities/organizations to lead workshops. As well as hold large discussion circles to facilitate communication and discussion

about sustainability between disciplines. Lastly, more faculty and staff with interest in sustainability should be sought out and hired.

16.5 RECOMMENDATIONS ABOUT INTERDISCIPLINARY SUSTAINABILITY AT CHAPMAN

After analyzing Chapman's history, comparing Chapman to other universities, and exploring existing faculty workshops, several recommendations have been created.

16.5.1 Low Cost and/or Effort

- ❖ Implement a faculty workshop that is focused on integrating sustainability within all disciplines that occurs at least once a semester. Implement a voluntary faculty workshop that is focused on integrating sustainability within all disciplines that occurs at least once a semester.
- ❖ These should be accessible as a free resource and learning opportunity for all faculty.
- ❖ This program would be mainly run by the Sustainability Department.
- ❖ Faculty would be informed about this through email, which would be further enforced by Program Managers.
- ❖ Once faculty have attended this workshop they will be given a certificate that shows they took part, as well as a sticker to place in their office, similar to those given out after Safe Space workshops.
- ❖ In addition, a pre and post survey will be implemented to determine the effectiveness of the workshop and ways that it can be improved for the future.

16.5.2 Medium Cost and/or Effort

- ❖ Renew Chapman's STARS "The Sustainability Tracking, Assessment & Rating System™"
- ❖ Most of the programs are outdated and the links to Chapman's website do not work. This requires more than just one individual, a team should be created to ensure completion.
- ❖ Send one faculty member from each school to conference workshop put on by AASHE
 - Ex. Sustainability Across the Curriculum Faculty Workshop
Santa Barbara, June 26th, \$75 a person (x 10 schools)

=\$750 a year

16.5.3 High Cost and/or Effort

- ❖ Creation of a "Critical Thinking within Sustainability" GE requirement
- ❖ Faculty from any discipline that go through at least two workshops could have sustainability certified classes, which after being looked over by a committee could then cover the GE requirement. Adding on to these workshops, a long-term addition could be the creation of a "Critical Thinking within Sustainability" GE requirement by grouping the language requirement with the Global Citizen requirement to allot space.
- ❖ Faculty that go through at least two workshops could have sustainability certified classes, after being looked over by a committee that has faculty from several disciplines, that can then cover the GE requirement with their class.
- ❖ This would be available in all disciplines.

16.6 CONTACTS

Erin Pullin, Director of Diversity & Inclusion, Office of the Provost, Chapman University
(pullin@chapman.edu (714) 628-2821)

Anna Leahy, Chapman University, Director of OURCA (Undergraduate Research and Creative Activity), Office of the Provost, Chapman University (leahy@chapman.edu (714) 628-2889)

Hesham El-Askary, *Faculty Research and Development Council Chair*, Chapman University
(elaskary@chapman.edu (714) 289-2053)

Chris Kim, Associate Dean of Academic Programs, Schmid College of Science and Technology, Chapman University (cskim@chapman.edu (714) 628-7363)

Justin Koppelman, Civic Engagement Coordinator, Department of Student and Campus Life, Chapman University (jkoppel@chapman.edu, (714) 997-6894)

16.7 REFERENCES

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16.8.1 Safe Space Attendance

Year	Staff	Faculty	Admin	Grad Assistant	NA
2004-2005	9	0	0	0	
2005-2006	9	1	1	0	
2006-2007	13	2	0	0	
2007-2008	5	0	0	0	
2009-2010	20	3	3	0	
2010-2011	8	1	0	0	
2011-2012	8	1	0	0	
2012-2013	19	13	0	0	
2013-2014	10	16	6	0	
2014-2015	5	0	1	0	
2015-2016	24	1	3	0	
Fall 2016	47	18	6	0	3
Spring 2017	14	11	1	4	
Total	191	67	21	4	3
Overall Total	286				

Figure 6 - Attendance by year and department for Safe Space Workshop

16.8.2 Sample Workshop Lesson Plan

WELCOME & OVERVIEW

- ❖ Why are we here?
 - Learn about the importance of sustainability and how it can be incorporated throughout disciplines
- ❖ What we hope to accomplish
 - Deeper understanding of sustainability and brainstorm ideas about incorporating sustainability within existing classes/developing new classes

INTRODUCTION

- ❖ What is sustainability?
 - “Meeting the needs of the present without compromising the ability of future generations to meet their needs”
- ❖ Why does it matter?
- ❖ Sustainability is about more than simply protecting the environment
- ❖ Education for a Sustainable Society: “enables people to develop the knowledge, values and skills to