

## CHAPTER 5

# Professional Development of Faculty for Sustainability Across the Curriculum

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This chapter introduces issues around PD for sustainability: not only content expertise in sustainability, but also pedagogy and leadership. What do faculty need to know to teach sustainability across the curriculum, and what certifications exist, or are desirable? Two models are described: one that certifies a course and one that certifies the faculty member. The key point in this chapter is that both deep, and broad, approaches have benefit for campus-based professional development.

In addition, this chapter raises the question of recognition of Sustainability Focused courses for students – for example, at Cedar Valley, if a student takes 3 such courses they are eligible for a green cord at graduation. Some recognitions are extracurricular, such as the Sustainable Citizen program at Northern Arizona University, and some, such as embedded certificate at Kapi'olani Community College, are integrated into academics. As Sustainability Focused courses become meaningful to students, there is a need to “certify” faculty who teach them.

### CASE STUDY: SUSTAINABILITY SCHOLARS PROGRAM AT MORAINE VALLEY COMMUNITY COLLEGE

The Sustainability Scholars Program, which is facilitated online, teaches faculty participants how to infuse sustainability into their existing curriculum regardless of their discipline. The final assignments faculty create are contextualized to reflect real-world applications related to sustainability concepts and practices. Faculty change course(s) to either relate to sustainability concepts and practices, using real-world applications, or redesign their entire course to be taught through the lens of sustainability. If the former, then the class is referred to as “sustainability-related” and if the latter, i.e., the lens of sustainability, then the class is referred to as “sustainability-focused.” These are terms borrowed from AASHE and its Sustainability Tracking and Assessment Rating System (STARS) program.

During the last almost 11 years the SSP has reached over 100 faculty from Biology, Nursing, Medical Record Technician, History, Heating and Air Conditioning, Automotive, Developmental Math and Reading, History, Communications, Speech, College 101, Career Planning, Art, Political Science, Economics, and Literature. The SSP coursework explores how faculty can integrate Sustainability; Social, Economic and Environmental Justice; Sense of Place; & Holistic Sustainability into courses.

The SSP has resulted in sustainability literacy, principles, and concepts woven across the college's academic disciplines and technical programs of study. Potentially, a student could graduate from Moraine Valley having had sustainability issues addressed in every class.

## Background

Originally called Greening Your Curriculum (GYC), the first faculty professional development course was developed and delivered by assistant professor of biology Michelle Zurawski in 2007. It was a six-week online course, which asked faculty to consider questions like: "what is sustainability?" and "how does it apply to my course?". Upon completion, faculty developed a course assignment to use in their course section(s). This program has grown substantially since 2007 and has had a significant impact on Moraine Valley's faculty and students, as well as at other colleges and universities.

In 2008, Zurawski was granted a faculty release time position to be the Sustainability Teaching and Learning Coordinator in order to further develop the GYC program. In 2009 the college hired its first Sustainability Manager Stephenie Presseller. This is a staff position reporting to both the Vice President of Academic Affairs and Vice President of Administrative Services. Presseller was charged with supporting Zurawski and her work with the GYC program. Primarily, Presseller helped with content research and guest posting in online discussions.

In 2010, the college opened the Center for Sustainability. It serves as a resource for the campus community and college district community. It also purchases resource materials for the GYC program and houses materials for students that are taking classes from GYC faculty. The Center is managed by Presseller and its development was the result of a grant awarded to the college by the Illinois Green Economy Network (IGEN). Some of those funds were also used to help incentivize more faculty to participate in the GYC program.

During the same year Moraine Valley President Dr. Sylvia M. Jenkins, in her previous role as vice president of academic affairs, decided to make the GYC program permanent professional development initiative in the Moraine Valley Learning Academy (MVLA). The MVLA provides comprehensive faculty professional development on a variety of teaching and learning topics as a substantial component of the college's Center for Teaching and Learning (CTL) – which provides professional development for all staff and faculty. Making it a permanent offering in the MVLA and CTL allows faculty to receive professional growth units to use toward advancement on pay scale and promotions.

With this increase in leadership support, financial incentives, and staff resources the GYC program has grown significantly and experienced several improvements. The name has changed twice. The first change was to add Prairie Project, i.e., GYC- Prairie Project. This involves 3, 6-week online workshops. Each have different themes that fully embrace the tenants of sustainability. They are followed by a 20 hour, face-to-face convocation. This process took

one and half years to complete, with the first workshop held in the Spring semester, followed by Fall, then Spring again and ending the face-to-face convocation in the Summer semester.

- Greening Your Curriculum 101: Intro to Greening Your Curriculum (online)
- Greening Your Curriculum 201: Eco-Literacy and Local Connections (online)
- Greening Your Curriculum 202: Green Economy and Social Justice (online)
- Greening Your Curriculum: SSP 203

At the end of each online workshop faculty created an assignment that addresses the topics and concepts they learned. At the end of the convocation faculty infused an entire unit or course with all of the topics of sustainability. When a faculty participant submits the final packet of all work completed they receive a \$500.00 stipend supported by the IGEN grant funds and distributed through the Center for Sustainability. Recognizing the increased enrollment and success of integrating sustainability throughout curriculum across many different disciplines, the college decided to continue the \$500.00 stipend after the grant money was exhausted. The Center still manages that budget.

The GYC-PP program was recognized by numerous organizations, including winning the Green Genome Award from the American Association of Community Colleges, Sustainable Education and Economic Development (SEED Center) and the Association for the Advancement of Sustainability in Higher Education (AASHE) acknowledging the program as one of their 14 nationally recognized Centers for Sustainability Across the Curriculum. Only three of the 14 regional centers are based at, or include, community colleges:

- University of Kansas and Johnson County Community College
- University of Hawaii System
- Moraine Valley Community College

Recently, Moraine Valley partnered with Aurora University to offer 3-graduate level credits for completing the course. The professional development program now combines all 4 units of the former GYC-PP into one semester. Thanks to our relations with the AASHE Centers for Sustainability Across the Curriculum and Moraine Valley's Corporate, Community and Continuing Education, faculty from any college or university can now participate in the SSP. In Summer 2017 12 faculty participated, several of whom were from outside of Moraine Valley. The Moraine Valley faculty are still eligible for the \$500.00 if the complete the final assignments and return them to the Center for Sustainability.

The SSP has gone through several iterations of development. There are benefits and challenges to each design. Keeping it small and simple, a 1 6-week course, meant that more faculty felt as though they could manage that time commitment. However, it also meant that they would not receive as much information as a longer course would offer. Having this much more robust program, as a full semester or course work, does seem imposing to some and will turn them away. However, those that have completed it feel they have received excellent

information, great professional development, and are confident infusing their curriculum with sustainability.

### An Example of SSP Impact

Mechanical Technologies: Heating and Air Conditioning (HAC)  
Sustainable Energy Technologies Academic Program

Instructor and Mechanical Technologies Department Chair Stevan Brasel is an SSP graduate. As a participant he identified innovative and interesting real-world applications through which he exposes students to practices and concepts of sustainability in the Heating and Air Conditioning degree and certificate programs. Assignments are designed to engage students in strategic thinking for energy reduction, understanding alternatives to status quo heating and cooling, exposing them to cutting edge energy saving technology and behavioral best practices. These real-world case studies require students to perform energy saving calculations and develop spec-proposals for potential clients to save money and energy.

As a result of his SSP participation Brasel developed an entirely new course: HAC 165 - Sustainable Energy Practices. This course covers sustainable energy practices, technologies, and innovations. Brasel knew the LEED Green Associate and other LEED professional accreditations are industry-recognized designations that could give students an advantage entering the green workforce. Brasel worked with the Center for Sustainability to establish a partnership with the US Green Building Council (USGBC) Center for Green Schools to access study materials for the LEED Green Associate exam. USGBC had received a grant to work with community colleges to provide access to these materials and the exam for free. The USGBC program no longer exists; however, Brasel continues to teach LEED and other green building standards to his students in the HAC 165 classes.

Other examples of curricular modifications for sustainability can be found on the MVLA Website: <https://ctl.morainevalley.edu/sustainability-scholars-program/> or via the Center for Sustainability homepage (Sustainability Curriculum):  
<https://www.morainevalley.edu/about/sustainability/>

### Challenges

The greatest challenge of the program is time. The online conversations get lengthy and it is expected the facilitator would respond to each thread. Sometimes the facilitator will need to provide more information or materials to help guide a participant in the right direction. In other scenarios the participants are very passionate about the topic in the conversation and will continue to post responses back and forth making it difficult for the facilitator to also keep up with the rest of the threads. However, this is a good challenge to have; participants that get very involved will increase their knowledge, gain more materials and develop stronger assignments.

## Opportunities

The college's comprehensive SSP initiative has established the college as a leader in sustainability practices and in developing sustainability literacy in faculty and students. Zurawski and Presseller often present about SSP at conferences, as well as share the model with, and develop trainings for, other colleges. Contact the Center for Sustainability at Moraine Valley Community College for more information on the Sustainability Scholars Program or other sustainability initiatives.

### CASE STUDY: THE QTIP MODEL AT CEDAR VALLEY IN LANCASTER, TX

Cedar Valley College is a two-year educational institution, located in Lancaster, Texas and has an enrollment of over 6,000 students. In 2011, Cedar Valley College President, Dr. Jennifer Wimbish, challenged its college Green Team (now called the Sustainability Team) to do two things

1. Encourage all faculty to teach sustainable principles in their courses.
2. Begin tracking the number of Sustainability courses taught at the College.

At the time, there was no program or mechanism in place to implement either of these charges, so a plan had to be devised. The goal was to get basic, practical sustainability practices and principles into EVERY course at the college.

The question was, "How could we develop a plan of action that would encourage all faculty – English, Math, Science, Business, etc. – to teach sustainability principles in their courses and, at the same time, track the thousands of courses offered by the College each year?"

The Cedar Valley team decided to track sustainability education by instructors rather than by courses, for there were far too many courses to track. Thus, a plan was developed to "certify" faculty - not courses.

Once faculty are certified, they illustrate how they'll teach sustainability in a particular course, then each course they teach incorporates that or those basic sustainability principle(s). The program is voluntary.

Interested faculty take a brief training course on incorporating sustainability into a particular course they teach. Additionally, they see an online 15-minute video, made by the Sustainability Team, that instructs faculty on how to incorporate sustainability principles into their course. On completing the training, faculty:

- Know how to define Sustainability
- Understand that Sustainability incorporates principles that promote environmental, economic, and social responsibility
- Demonstrate specifically how they will teach sustainable principles in their course(s)

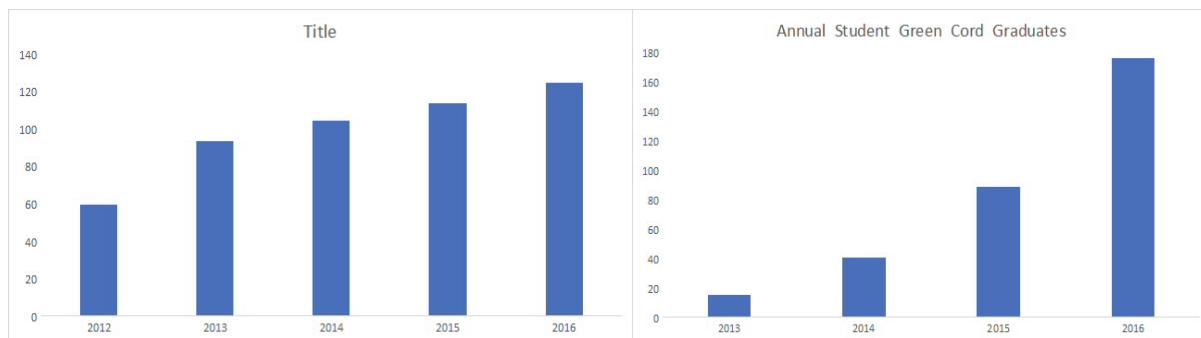
Once faculty have completed this brief training and filled out an application that reinforces builds on the content they are recognized as QTIPS (Quality Teaching in Practical Sustainability) Certified Instructors.

QTIPS-Certified Instructors are the only recognized faculty who may teach Green courses at the College. Each course taught by QTIPS Faculty is coded as a Sustainability course in the College scheduling system, so students know when they sign up for a course that it is a Sustainability course. Students who successfully complete a minimum of three Sustainability courses with a grade of "C" or better graduate as "Green Cord" students and are entitled to wear their Green Cord at graduation.

The Green Cord Program is marketed to students primarily at the beginning of each school year and the beginning of each semester, and periodically thereafter with special emphasis about one month leading up to graduation.

This program, in its entirety, was warmly embraced by faculty and students. The charts below indicate how participation in both the QTIPS and the Green Cord programs helped each other to increase over a four year period.

#### Increase in Faculty Participation in QTIPS training and Green Cord Graduates



#### Best Practices

In order for a program like Q-TIP to have success within a given environment, certain basic elements must be in place:

- There must be an institutional dedication to promoting sustainability principles in all courses across all disciplines.
- There must be at least one individual to take up and "champion" the cause.
- Tracking systems must be in place to categorize courses and trace students successfully completing those courses.
- The campus Marketing Department must be cooperative and effective in communicating the Green Cord Program to students.

- Administration must cooperate with funds for Green Cords and dedicating personnel to assist in screening Green Cord Graduates.

## **Barriers**

As anyone working in professional development will know, a program like this one can reach a saturation point where it can either grow, plateau, or die. A key ingredient in program growth is leadership support and funding. The changing dynamics of the college's leadership, funding, and strategic direction means that the future of QTIPS is uncertain. This cycle is all too common, and unfortunate, at community colleges where priorities, workloads, and funding streams can change and institutional memory can lapse. Once the "low hanging fruit" faculty have been trained, maintaining program momentum becomes a challenge. The chances of this type of cycle occurring may be diminished through a mentoring program of other "kindred spirits" within the college who share the same vision of promoting sustainable principles, regardless the cost.

When community colleges are organized as a system, there is always the potential to scale a successful initiative across multiple campuses; this is a strategy to institutionalize successful endeavors and keeping them from failing through loss of a champion or turnover in leadership. Cedar Valley College introduced a proposal to the Dallas County Community College District for consideration on a District-wide basis for all faculty and its 70,000+ students. A team with representatives from each of the system colleges is considering implementation of a coordinated development program in Sustainability across the Curriculum at all 7 DCCCD campuses.

## **DISCUSSION**

*This chapter describes two very different paths taken by colleges in developing professional development initiatives for sustainability across the curriculum. What are the benefits of each, and what program designs lie in the middle? Where does your college's in-house PD lie on this spectrum?*

## **FURTHER INFORMATION**

QTIPS training video:

<https://www.youtube.com/watch?v=T4Y60hg9vEI>

GREEN CORD video for students' viewing:

<https://www.youtube.com/watch?v=0AKRPzEOtjk>

Program description from a student's perspective

<https://www.youtube.com/watch?v=zRF7-kVg1ng>



National Council for  
Science and the Environment

Thank you for reading this chapter of the NCSE Community College  
Handbook for Sustainability Education and Operations.

Does your institution do something different in this area?  
Do you have a project, program, or innovation in practice in this area?  
[Please consider submitting a case study to NCSE.](#)

NCSE will review your case study and an NCSE team member will reach out to you for additional information. The case study may be included in the NCSE Community College Handbook for Sustainability Education and Operations.