Journal of Sustainability Education Vol. 4, January 2013 ISSN: 2151-7452

Designing, Developing and Assessing Online Intra-collegiate Earth Charter Projects: Focus on Diversity

Sheila Bolduc-Simpson College of Arts and Sciences Florida Gulf Coast University

Mark W. Simpson College of Education Florida Gulf Coast University

Keywords: Earth Charter; diversity; undergraduate research; project-based learning; education; team projects; online collaboration.

Abstract: This article describes a collaborative online project that focused on the Earth Charter, particularly on its principles related to diversity. The project was conducted in two online courses of three sections in two colleges at Florida Gulf Coast University (FGCU): the College of Arts and Sciences and the College of Education. One section of twenty-three students in a Composition II course and fifty-four students in two sections of an Introduction to Diversity for Educators course collaborated in mixed teams on a four-stage problem solving project that exposed the participants to a larger community of learners and reinforced shared responsibility for the present and future welfare of the human family and the global community.

Sheila Bolduc-Simpson is an Instructor II in the College of Arts and Sciences at FGCU. She teaches composition and business writing courses in F2F, hybrid and online environments. She researches 21st century writing skills.

The project focused on Principles 1- 3 and 8-16 of the Earth Charter related to diversity and culminated in each of twenty-two teams completing an undergraduate research paper, an activity to implement the research, and a research poster for presentation on Research Day held on April 20, 2012 at FGCU.

Surveys were administered to the students during the first week of the course before the project began and as the project ended to determine their awareness and knowledge of one to two principles of the Earth Charter related to diversity. Ninety-five percent of the thirty-three students who completed the post survey strongly agreed or agreed that they were able to discuss one to two principles of the Earth Charter related to diversity. With these encouraging results, the authors plan to offer online collaborative Earth Charter Diversity projects to their first year composition students and their students who are considering entering the field of education.

Introduction

The Center for Environmental and Sustainability in Education is a fledgling FGCU organization beginning to address the Earth Charter Initiative in the last three years. One of The Center's curriculum initiatives is an interdisciplinary studies class held each academic year called "Living the Earth Charter." This class examines ways that students can apply the Earth Charter principles both personally and communally (Center for Environmental and Sustainability Education).

Other higher education institutions have a longer history of offering Earth Charter-related courses. For example, the University of Wisconsin at Oshkosh (UWO) has sponsored Earth Charter Community Summits since 2001 to raise awareness of the Earth Charter and sustainability issues. These yearly free summits are open to everyone, including the Oshkosh community. UWO is one of only eight colleges and universities that as entire institutions (rather than departments or centers) endorse the Earth Charter. In fact, it is the only institution of higher learning in Wisconsin that endorses the Earth Charter (Office of Sustainability).

Succar and Sandoval (2012) use the Earth Charter at the University of Guanajuato to raise awareness among their students of the importance of its principles. Their case study involved students pursuing bachelor's degrees in a variety of disciplines who participated in a training program to become Youth Promoters of the Earth Charter at the university. The students were three Environmental Engineering majors. Over two years, from 2005 to 2007, twenty-seven workshops were facilitated by these Youth Promoters with close to three thousand faculty, staff, and students participating. The authors concluded with a recommendation to evaluate the effectiveness of these workshops in promoting more awareness of the Earth Charter Initiative.

Stephanie Johnson (2006) summarizes other success stories of the implementation of the Earth Charter at institutions of higher learning. She briefly describes twenty case studies of the practical application of the Earth Charter. For example, at Michigan State University, professors have developed a sustainability course that focuses on self-expression, personal reflection and active engagement rather than passive learning of theory.

Mwaura (2007) investigated education faculty and student teachers' awareness of Education for Sustainable Development (ESD) to promote sustainable development. The study involved eighty-one students and thirteen faculty members in an undergraduate teacher education course at the Catholic University of Eastern Africa. The study concluded that student teachers had some ESD knowledge and that education faculty were not fully involved in community engagement as it related to educating others for sustainable development.

Another example of an institution that has brought awareness of the Earth Charter to its students is The University for Peace (UPEACE) in Costa Rica. This United Nations affiliated university uses the Earth Charter as an educational tool. All of UPEACE's students are introduced to the Earth Charter during the course of their studies and feedback from students who attended the summer, 2011 offering of "Educating for the 21st Century" noted that they found value in curriculum building centered on the Earth Charter (Educating for the 21st Century).

Collaboration - Project Earth Charter: Diversity

Goal and learning outcomes

This co-curricular project addressed FGCU's Goal 2: Culturally Diverse Perspective. The goal states that a student should

"Know and understand the diversity of the local and global communities, including cultural, social, political and economic differences. Analyze, evaluate, and assess the impact of differences in ethnicity, gender, socioeconomic status, native language, sexual orientation and intellectual/disciplinary approaches. Participate in collaborative projects requiring productive interaction with culturally-diverse people, ideas and values" (Florida Gulf Coast University Academic Catalog).

The specific outcomes involving knowledge, understanding, analysis, evaluation, and collaboration provide the basis by which the university and the learner, sharing responsibility, can measure progress toward reaching Goal 2 and the other eight goals outlined in the 2011-2012 Academic Catalog.

This project was also aligned to the Earth Charter Initiative's mission "to promote the transition to sustainable ways of living and a global society founded on a shared ethical framework that includes respect and care for the community of life, ecological integrity, universal human rights, respect for diversity, economic justice, democracy, and a culture of peace" (The Earth Charter).

Funding

The authors received a mini grant from The Center for Environmental and Sustainability Education at FGCU to design, develop, implement and assess this project.

Project grading & components

Project Earth Charter: Diversity began in Week 7 of the Composition II and the Introduction to Diversity for Educators courses. The project represented 25% of each student's final grade in all three classes, or 250 points. The students in each of the three sections had other assignments associated with the content of each of the two courses. These assignments were housed in their course in Angel, the learning management system (LMS) at FGCU. **Project Earth Charter: Diversity** was set up as a separate merged course in the LMS so that the instructors had access to one roster and one set of folders related to the project. The assignments are listed in Table 1.

#	Stages	Assignments	Due Date	Possible Points
1	Planning	Poster Registration/Participation in Team Discussion Forum	by 11:55 p.m. on 03.04.12	25
_	Research	Annotated Bibliography	by 11:55 p.m. on 03.19.12	- 25
2		Statement of Problem and Literature Review	by 11:55 p.m. on 03.26.12	
	Product (Project Implementation)	Survey or Interview Questions	by 11:55 p.m. on 04.02.12	25
3		Methodology Section of Research Paper	by 11:55 p.m. on 04.02.12	
		Project Implementation Activity	by 11:55 p.m. on 04.09.12	50
	Poster	Final Research Paper (including Abstract, Findings, Conclusions & Recommendations sections)	by 11:55 p.m. on 04.12.12	50
4		Poster Template	by 11:55 p.m. on 04.16.12	25
		Poster Presentation	on 04.20.12	25
Total Points				250

Table 1: Project Earth Charter: Diversity Stage Assignments

Planning Stage: Week 7

The Planning Stage began in Week 7 of the two courses, or approximately midway through the semester. Prior to the beginning of the project, the students in each of the courses completed readings and assignments related to diversity but had not yet been introduced to the Earth Charter (Read the Earth Charter). During the Planning Stage, students watched a 10-minute film providing them with an overview of the Earth Charter Initiative (EC International). The objectives and history of the Earth Charter were explained along with examples of actions and activities inspired by the Earth Charter. Students were then provided with an overview of the entire team project, which included group role descriptors - Project Leader, Research Coordinator, Product Coordinator, Poster Coordinator (Bolduc-Simpson and Simpson, 2012), the Earth Charter document (Read the Earth Charter), and thirty diversity project descriptions classified under nine general topics and linked to twelve Principles of the Earth Charter related to diversity (e.g., Hate Symbols, The Power of Language, Humane Education, Songs and Social Injustice, Immigrant Groups in Southwest Florida, Teaching Styles vs Learning Styles, The Establishment Clause & Religion, Religious Bias in Textbooks, Gender Bias in the Classroom, Understanding the LBGT Community at FGCU, Aegism & Elder Abuse in Southwest Florida, Students with Learning Disabilities, Homelessness in Lee County, Veterans of Southwest Florida).

Team members were assigned by the instructors grouping first year Composition II students with first to third year students in the two sections of Introduction to Diversity for Educators. Twenty-two teams of four students were initially formed.

A Team Discussion Forum was set up for students to communicate and share documents among their team members at any time during the project. The students also used other communication methods that ranged from the Live Chat feature in the LMS to Facebook, texting, and face-to-face meetings.

An additional discussion forum titled *Ask SBS & Dr. S* was created so that students could post questions about **Project Earth Charter: Diversity** at any of the stages in the project.

Besides familiarizing themselves with the project materials and attending to other courserelated assignments, the teams were required to choose a project topic and complete the online poster registration process for Research Day with the Office of Research and Sponsored Programs at FGCU. All team members were also required to introduce themselves in the Team Discussion Forum.

Research Stage: Weeks 8, 9, 10, & 11

During this 4-week period, the team, led by the Research Coordinator, conducted research on their topic, completed an annotated bibliography assignment, and began working on the Statement of the Problem & Literature Review sections of the research paper. A research paper template was provided (Elements of a Research Paper), along with sample sections of a research paper drafted by the instructors and related to the topic of Earth Charter Awareness at FGCU. Additional materials were provided to the students in the form of YouTube videos on how to write an annotated bibliography (How to Write an Annotated Bibliography Tutorial) and conduct research (Gomesify, 2010). The purpose of this stage was to gradually introduce students to the research process and writing a research paper. Students collaborated on the paper using Google Docs posting their Docs links in their Team Discussion Forums.

Product Stage: Weeks 12 & 13

The Product Stage, or implementation stage of the project, was designed to give students the opportunity to design a survey or draft a set of interview questions to the target audience of their study. This stage included four assignments: the survey/interview questions; the methodology section of the research paper; the findings section of the research paper; and, the actual project implementation, which was an activity that was tied to the project and attempted to solve the problem that the team had identified. Once again, in order to facilitate the process, the instructors provided a list of fifteen activity ideas related to the Earth Charter topics (e.g., a website, a recorded presentation, a magazine, a brochure, a video, a TV ad, a cartoon book, an interview, a slideshow, a blog, a information-dissemination table on campus, a poster) and suggested methods to carry out the activities and appropriate tools to use with the methods. For example, Activity 1 involved creating a flash mob event. The method was to text, Facebook, or tweet

fifteen people who would meet on the FGCU Library Greens at a certain time in early April and do a dance/song/poem that would bring awareness of the four pillars and principles of the Earth Charter. The tool that could be used might be a camera to videotape the event and make a YouTube video that would later be shared with at least 400 students at FGCU.

In Week 12 of the course, the survey/interview questions were required. In Week 13, the activity was to be completed along with the findings section of the research paper. In addition to a sample survey and a document outlining the guidelines for conducting research interview questions (McNamara), students could watch two short YouTube videos on how to use a survey tool – surveymonkey (AndyAmyonBiz, 2011) and a five-minute video that provided tips for conducting a good interview (Couric, 2009).

Poster Stage: Weeks 13 & 14

The final stage of the project began in Week 13 of the course and consisted of three assignments: completing the research paper inclusive of an abstract; work on the research poster template; and, the poster presentation to faculty, students, the local community, and judges on Research Day (April 20, 2012) at FGCU.

This stage was once again structured for success and included readings and materials on writing research paper abstracts (Purdue OWL: Report Abstracts), the poster template, specific directions for completing it, and information for all Research Day participants that was issued from the Office of Research and Sponsored Programs.

Assessment - Project Earth Charter: Diversity

Pre-course survey

A pre-course survey in each of the sections of Composition II and Introduction to Diversity for Educators was administered during the first week of the course. One item sought student familiarity with the Earth Charter, particularly as it related to the concepts of diversity: "I can discuss one or more areas of the Earth Charter that are related to diversity." Sixty-six (66) students responded to the item, of which 79% either strongly disagreed, disagreed, or were neutral in their responses (Figure 1).

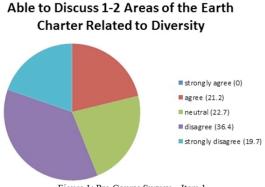


Figure 1: Pre-Course Survey - Item 1

Post-course survey

Thirty-nine (39) students completed the post-project survey. As shown in Figure 2, almost 95% of the students reported that they were able to discuss 1-2 areas of the Earth Charter related to diversity.

Able to Discuss 1-2 Areas of the Earth Charter Related to Diversity

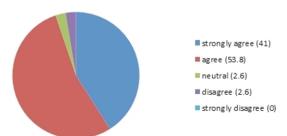


Figure 2: Post-Project Survey – Item 1

Research Day at Florida Gulf Coast University



Research Day 2012

On April 20, 2012, twenty-one teams of 2-4 members presented their undergraduate research posters on their Earth Charter diversity topics to the FGCU academic and local community. Project topics ranged from studies on homelessness and poverty in Lee County to the indigenous peoples of Southwest Florida (Project Earth Charter – Diversity – Research Day – April 20, 2012).

At the conclusion of the whole-day event, one of the twenty-one teams won the College of Education Undergraduate Research Award for their work on the indigenous peoples of southwest Florida. Figure 3 captures Team 11's winning poster.

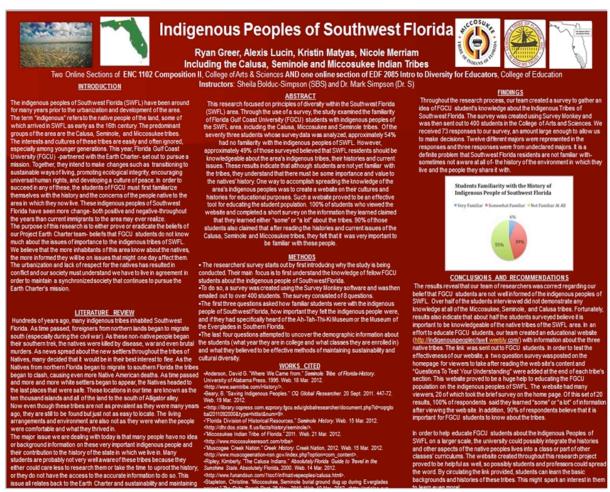


Figure 3: Indigenous Peoples of Southwest Florida - Team 11

Team 11 also developed a website which summarized their research on students and the three major tribes in southwest Florida: Calusa, Seminole and Miccosukee reflecting much of the content included in their research paper.

Assessment of the project

Students completed a ten-question survey on their experience of collaboratively working across campus and online on the Earth Charter diversity project. The purpose of the survey was to obtain data to improve and further develop future collaborative merged-course initiatives that incorporate Earth Charter principles as they relate to diversity. Sixty-four students responded to the survey.

In general, the students favorably responded to the online project and felt that it was a positive experience (Table 2).



Table 2: Post-Project Survey - Item 2

A representative sampling of comments students wrote are included in the Appendix.

Strategies for designing rich and meaningful online co-curricular team projects

Designing team projects can be challenging in a face-to-face course. Add to the mix a team project involving three different sections of two online courses in different colleges in a university and the tasks become complex. Ensuring that effective team collaboration and meaningful learning occur demand time and commitment on the part of all concerned. The authors suggest five strategies for designing a rich and meaningful collaborative online learning project using effective communication tools. The strategies include:

- 1. prompt and frequent instructor-student communication;
- 2. student use of a variety of communication and collaboration tools (Google Docs, Facebook, discussion forums, online chat rooms, survey tools, texting, etc.):
- 3. instructor modeling;
- 4. a structured research process including the development of a research paper, an activity, and a presentation (poster, academic paper); and,
- 5. a project management methodology in which team-member roles and responsibilities are clearly explained.

Future directions

Based on the success of the project, the instructors are planning revisions to their Spring 2013 merged courses incorporating student feedback and reworking assignments to reduce student workload. Overall, the project was effective in developing in composition students and potential future educators not only an awareness of the Earth Charter but also a shared responsibility that we all should strive to be informed global citizens who work together toward building and preserving a sustainable global society.

Appendix

Project Earth Charter: Diversity - Student Comments in Post-Project Survey

How would you describe your overall experience working on Project Earth Charter: Diversity?

- I had never heard of this project before this class and I'm glad I have the knowledge about it now. This is something I may want to include in my future lesson plans. I had a great experience at Research Day as well, before this project I did not know what Research Day was all about and I'm glad I got to be involved in it, it made me feel like I was part of something and all the hard work stood for something. It was definitely very interesting to do the research on this topic and figure out things, it was just hard to do a group project for an online course.
- Pushed me to go beyond the class and actually meet with professors to learn their unique views as faculty here at FGCU.
- Project Earth Charter was a very good experience overall. The project went very smooth!
- It was an interesting project. It took up way too much time and students have work and other class work to do. I think this project should be optional or only have the students that are in an actual classroom do the project. Putting two totally different classes together to me was a huge problem.
- I had a good experience working with Project Earth Charter. The main thing that I felt could have been improved was how often our team communicated.

How would you rate the overall value of the Project as it relates to the academic work you are expected to do at this university?

- *I learned how to do research, and create a formal presentation.*
- We chose a topic that I feel that I could relate to. So I believe that was helpful in all the work that was done. Robin and I both looked at ourselves and that was helpful to relate to everything.
- It is valuable because we have to be able to do research throughout our educational career and this is a good starting point.
- The value of this project really showed how important it is to work as a team, which I will always be doing as a teacher in the future as well as in other classes.
- I think it is valuable because you actually learn what goes into writing a research paper, it covers all the steps.

References

- AndyAmyonBiz. Survey Monkey Tutorial YouTube. *YouTube Broadcast Yourself.* Apr. 2011. Retrieved June 13, 2012 from www.youtu.be/e2qG14YX5O4.
- Another Successful Research Day. *Office of Research and Sponsored Programs*. Florida Gulf Coast University. Retrieved June 13, 2012 from www.fgcu.edu/ORSP/FundingResources/May2012Newsletter.pdf.
- Center for Environmental and Sustainability Education. *Florida Gulf Coast University Fort Myers, Florida*. Florida Gulf Coast University. Retrieved June 13, 2012, from www.fgcu.edu/CESE/earthcharter.html.
- Couric, K. Katie Couric on how to conduct a good interview. *YouTube Broadcast Yourself.* 26 June 2009. Retrieved June 13, 2012, from www.youtu.be/4eOynrI2eTM.
- EC International. Earth Charter Initiative at a Glance. *YouTube Broadcast Yourself.* 7 Feb. 2010. Retrieved June 13, 2012, from www.youtube.com/watch?v=h7SUwoSjC A.
- Educating for the 21st Century. *UPeace Center for Executive Education*. Retrieved June 13, 2012, from http://www.centre.upeace.org/index.php/courses/82-educating-for-the-21st-century-.
- Elements of a Research Paper. *Study Guides and Strategies*. Retrieved June 13, 2012, from www.studygs.net/wrtstr8.htm.
- Florida Gulf Coast University Catalog. *Florida Gulf Coast University Fort Myers, Florida*. Florida Gulf Coast University. Retrieved June 13, 2012 from www.fgcu.edu/Catalog/learninggoals.asp.
- Gomesify. Conducting Research.wmv. *YouTube Broadcast Yourself.* 6 Oct. 2010. Retrieved June 13, 2012, from www.youtube.com/watch?v=91GZeGKLGao.
- How to Write an Annotated Bibliography Tutorial. *YouTube Broadcast Yourself.* UMC Library, 21 July 2010. Retrieved June 13, 2012, from www.youtube.com/watch?v=lzX9c0AhwYc.
- Johnson, S. Cases of the Earth Charter in Motion. *Ebook Search & Free Ebook Downloads Ebookbrowse.com*. Retrieved June 13, 2012, from www.ebookbrowse.com/cases-of-the-earth-charter-in-motion-ver-4-doc-d36721937.
- McNamara, C. General Guidelines for Conducting Research Interviews. *Free Management Library (SM)*. Retrieved June 13, 2012, from www.managementhelp.org/businessresearch/interviews.htm.
- Mwaura, K. An Investigation Into Awareness About Education for Sustainable Development (ESD): A Study of the Faculty of Education at the Catholic University of Eastern Africa. *An*

- Investigation Into Awareness About Education for Sustainable Development (ESD): A Study of the Faculty of Education at the Catholic University of Eastern Africa. 21 Sept. 2007. Retrieved June 13, 2012, from
- www.earthcharterinaction.org/invent/images/uploads/KINYANJUI%20NICHOLAS%20MW AURA,%20thesis,%208.07.pdf.
- Office of Sustainability|Your Campuswide Resource. *Office of Sustainability* | Your Campuswide Resource. University of Wisconsin Madison. Retrieved June 13, 2012, from www.sustainability.wisc.edu.
- Project Earth Charter Diversity Research Day April 20, 2012. *YouTube*. Retrieved November 26, 2012, from http://www.youtube.com/watch?v=gJVoKUQW4qU.
- Purdue OWL: Report Abstracts. *Welcome to the Purdue University Online Writing Lab (OWL)*. Retrieved June 13, 2012, from www.owl.english.purdue.edu/owl/resource/656/1/.
- Read the Earth Charter. *Sustainable Development Earth Charter Initiative*. Retrieved June 13, 2012, from www.earthcharterinaction.org/content/pages/Read-the-Charter.html.
- Succar, S., & Sandoval, M. Using the Earth Charter to Raise Awareness Among University Students. *Good Practices Using the Earth Charter*. Retrieved June 13, 2012, from www.earthcharterinaction.org/invent/images/uploads/Good%20Practices.pdf.
- The Earth Charter. *The Earth Charter*. Retrieved June 13, 2012, from www.earthcharterinaction.org/invent/images/uploads/echarter_english.pdf.