Climate Education Course Proposal for School of Sustainability

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Abstract

Seeking to address the lack of eco-literacy, we developed a syllabus for a course at Loyola University Chicago with the intended purpose of instilling climate knowledge to others. Through our own experiences studying environmental sustainability, we shared the same issue of lacking inadequate communication skills about climate change for different audiences. To develop the course structure and content, we gathered knowledge from community experts in environmental education and researched what other schools have implemented in the environmental education field. Our product is a syllabus, learning outcomes, and rationale for a new course devoted to teaching Loyola undergraduates how to educate others about climate change in ways that enable people to help avert the climate crisis.



Figure 1. Audience at LUC's Climate Conference 2023. Image Source: @loyolases on Instagram.

Justification/Project

This project challenges our Jesuit education system to support students' capability to communicate about environmental issues and conflicts effectively. These skills can transfer to any population, age, and geography to change conservation behaviors and eco-literacy levels for the betterment of public health and wellbeing.

Figure 2.
Artwork done by Anum.
Image source:
"Children's Art and Poems about Climate Change" on website Save the Children.



Methods

- Learned the process for how to implement a course at Loyola that has the potential for Service Learning.
- Surveyed Loyola students' interest and faculty opinions on the course.
- Researched education curricula and resources to write a full 15-week syllabus for the course.
- Identified a network of experts on Climate Education to better help future SES students.

Research

- Reviewed research literature on behaviors, learning styles, and social psychology to find the most effective way to communicate about environmental issues.
- Communicated with experts in the field
 - SES Associate Dean of Graduate Programs: <u>Linda Kurtos</u>
 - CELTS Associate Director & Service-Learning Program Manager: Susan Haarman
 - SES Associate Dean of Academics: Chris Peterson
 - SES Assistant Dean of Undergraduate Studies: Rachel Leamon
 - Professor in School of Education: <u>Lara Smetana</u>
 - LUC alumni of School of Education and School of Sustainability: Micah Zaker
 - 5th grade teacher at Wildwood IB Magnet School: <u>Ryan</u> <u>Vanoverbeke</u>
- Volunteer and Intern Coordinator at Peggy Notebaert Nature Museum: <u>Anabel Hirano</u>
- Owners of Green Explorers Club: <u>Erin Gibb and Kelly Vincent</u>
- Gathered information on interest and importance from Loyola student's point of view on having a Climate Education Course

Do you think that having a Climate Education Class in SES is important?

Figure 3. 23 SES students' opinions of the importance of Climate Education.

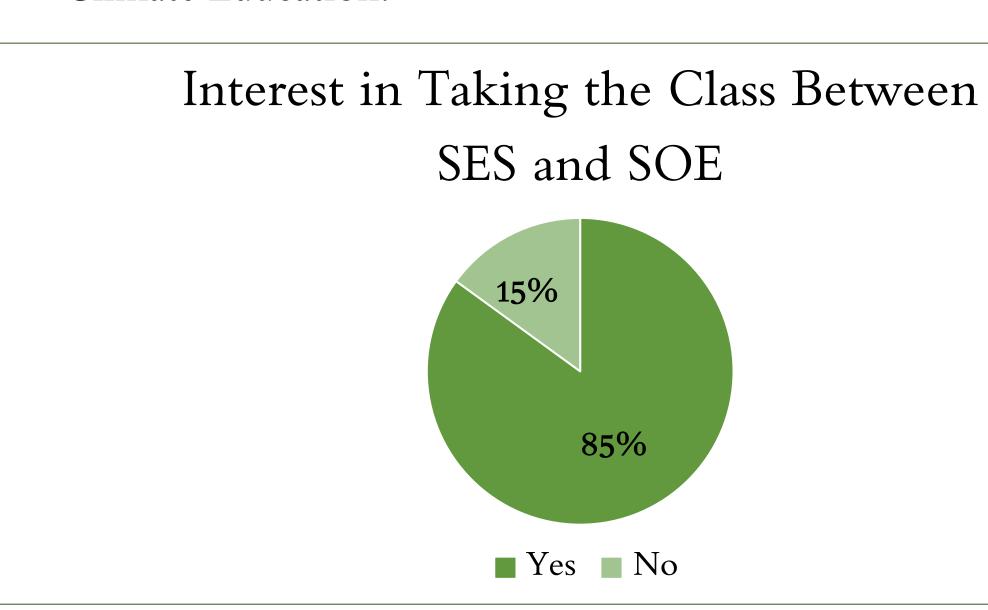


Figure 4. Interest of 31 interdisciplinary SES and SOE students in the Climate Education Proposed Course.

Results

- Syllabus created for a new course to be proposed by our mentor, Dr. Schusler, to the School of Sustainability.
- Student and faculty interest generated through meetings and survey questionnaires.
- Connections made between service-learning organizations in the greater Chicago area and School of Sustainability.

Learning Outcomes

Upon successful completion of the Climate Education course, students will be able to:

- Communicate about environmental issues and solutions in ways that will leave people of all ages hopeful and mindful.
- Explain the basics of climate change, its natural versus anthropogenic root causes, and solutions.
- Apply knowledge of conservation behavior and change to design, implement, and evaluate educational experiences for learners across diverse backgrounds and contexts.
- Connect across the disciplines of Education, Policy, Sociology, Anthropology, and Communication through Project Based Learning.



Figure 5.
Children at
Green
Explorers
Club
afterschool
program
participating
in a hands-on
lesson on
compost.
March 2023.
Image Source:
Rachel Maria

Discussion

We combined expertise from research literature, Chicago community educators, SES and SOE faculty and staff, who were just as enthused about this idea as we were. Our final results are a syllabus that can be adapted to fit an engaged learning course, a course proposal, and detailed notes of our findings about needs and expertise that this course elicits. This course combines the studies of Education and Life Sciences and exemplifies behavioral and action-based approaches to socially and politically complex environmental issues. Through this course Loyola students will learn how to effectively engage with audiences in ways that elevate their eco-consciousness.

A project limitation is the uncontrolled factor of whether SES will choose to add this course given teaching schedules. Our proposed course will enable eco-literate Loyola students to effectively communicate their scientific knowledge of climate change and environmental issues to different audiences. Next steps would be its implementation in SES and the future creation of an Environmental Education major. To ensure that climate change is taught to all generations in a hopeful and effective manner, SES should implement this project-based course providing students with education and communication skills in their specializations.

Acknowledgments

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