

# Furthering a Synergetic OSU Sustainability Curriculum

Stella Barnes (barnes.756@osu.edu), Bailey Delacruz, Rachel McDevitt, Leyna Rosen

## INTRODUCTION

This project contributes to a larger initiative by the Ohio State University to further transdisciplinary environmental and sustainability education.

Faculty leaders at Ohio State are developing a comprehensive framework that defines a university-wide structure for delivering sustainability education. The goal of our project is to assist OSU in developing this comprehensive framework by providing a basis for reference and set of recommendations with which these groups can begin the development process.

## RESEARCH GOALS

- Analyze sustainability curricular offerings
- Evaluate communication/marketing strategies
- Interpret student preferences and interests

## Conceptual Framework for Sustainability Education

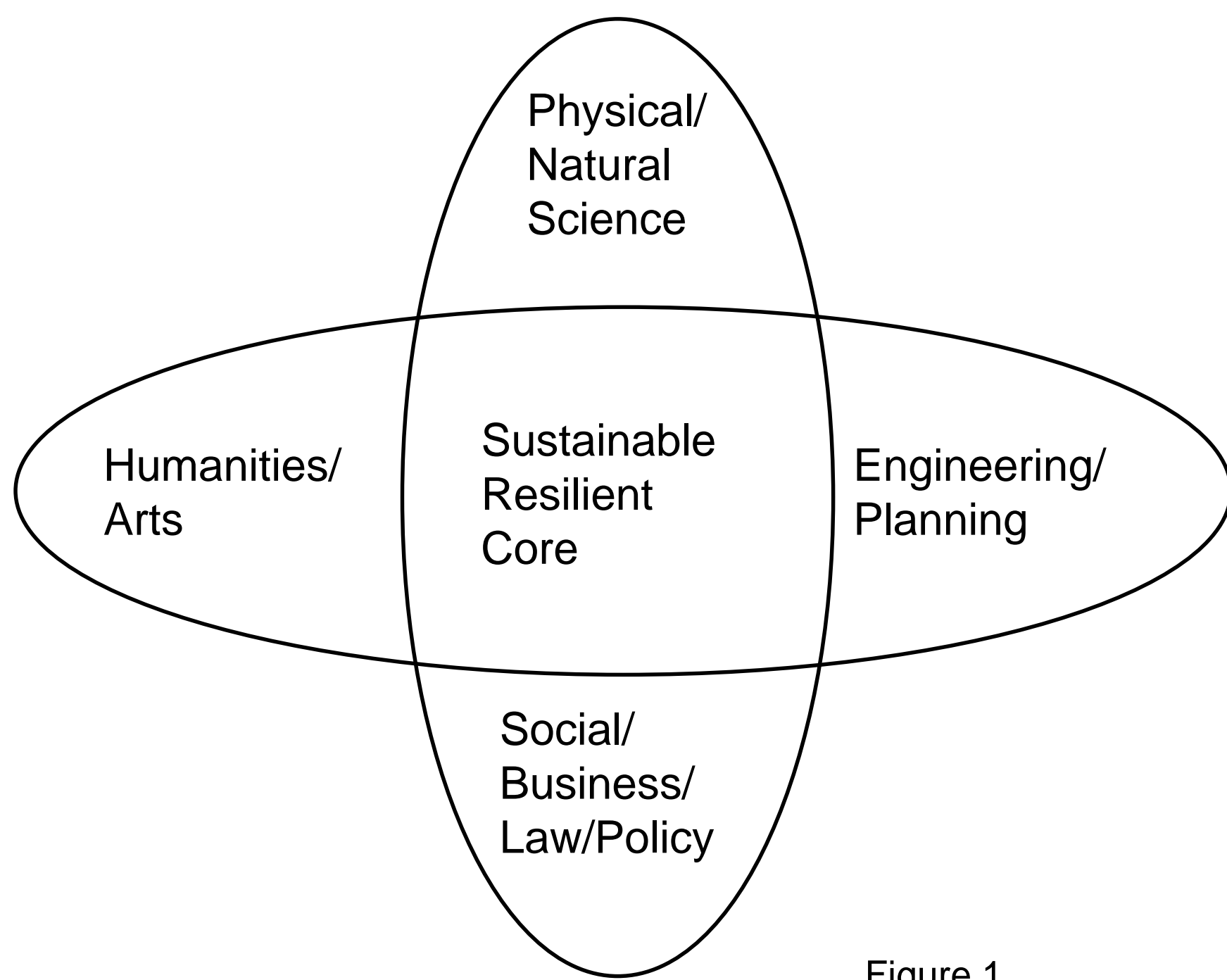


Figure 1.

## METHODS

Researched 8 universities, half Big Ten, half aspirational  
\*9 including Ohio State

### Benchmarking

- Reviewed curriculum information via websites
- Collect specific program information via direct contact with faculty/administrator interviews

### Student Preference

- Survey emailed to 50,000 undergraduate students at Ohio State
- 3,900 responses

## BENCHMARKING RESULTS

### Sustainability Curriculum Offerings

- Majors:
  - PSU: Energy Business & Finance
  - ASU: Sustainable Energy, Materials & Technology
- Graduate Certificates
  - MSU:
    - Environmental & Social Systems Modeling Certificate
    - Forest Carbon & Climate Certificate
- Dual-Degree Sustainability Programs
  - ASU: BA in Arts of Sustainability combined with BS in Supply Chain Management

### Sustainability Communication/Marketing Strategies

- Sustainability Advisors
  - Professors request sustainability students to present to their class
- Searching academic programs by interest
- High School outreach
- Sustainability Teaching Fellows
  - Workshops integrate sustainability into current courses
- Advisors by theme area



## University Comparison Table

University	Category	Tot. Population	Intr. Grad	Intr. Majors	Intr. Minors	Intr. Certificate	Search by Interest	Institute/Office	Interesting Initiatives
Arizona State	Aspirational	71,900		X	X		X	X	
Illinois	Big Ten	33,900		X	X			X	X
Maryland	Big Ten	38,100			X			X	X
Michigan	Big Ten	46,000		X	X			X	X
Michigan State	Big Ten	39,000		X				X	
Penn State	Big Ten	46,600	X	X	X	X	X	X	
UC Boulder	Aspirational	33,200	X	X	X	X	X	X	X
Wisconsin	Big Ten	43,300		X			X	X	

Table 1.  
Intr. = interdisciplinary

## SURVEY RESULTS

Results to "If you had the opportunity to take a sustainability course what would you like it to be?"

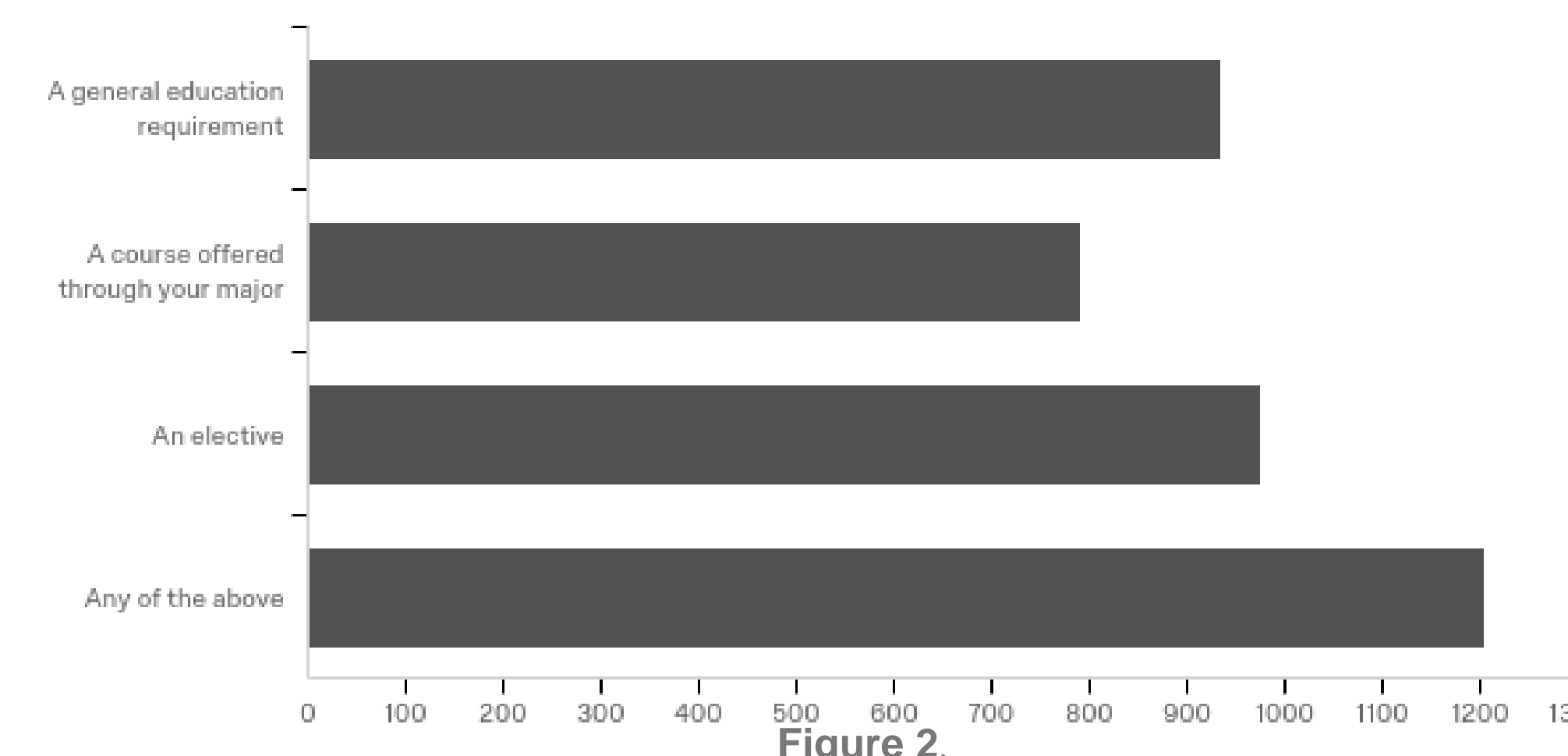


Figure 2.  
Majors & Minors that Participated in the Survey



Figure 3.

Results to "Were you aware that OSU offered sustainability related majors and minors before you began your coursework at Ohio State?"

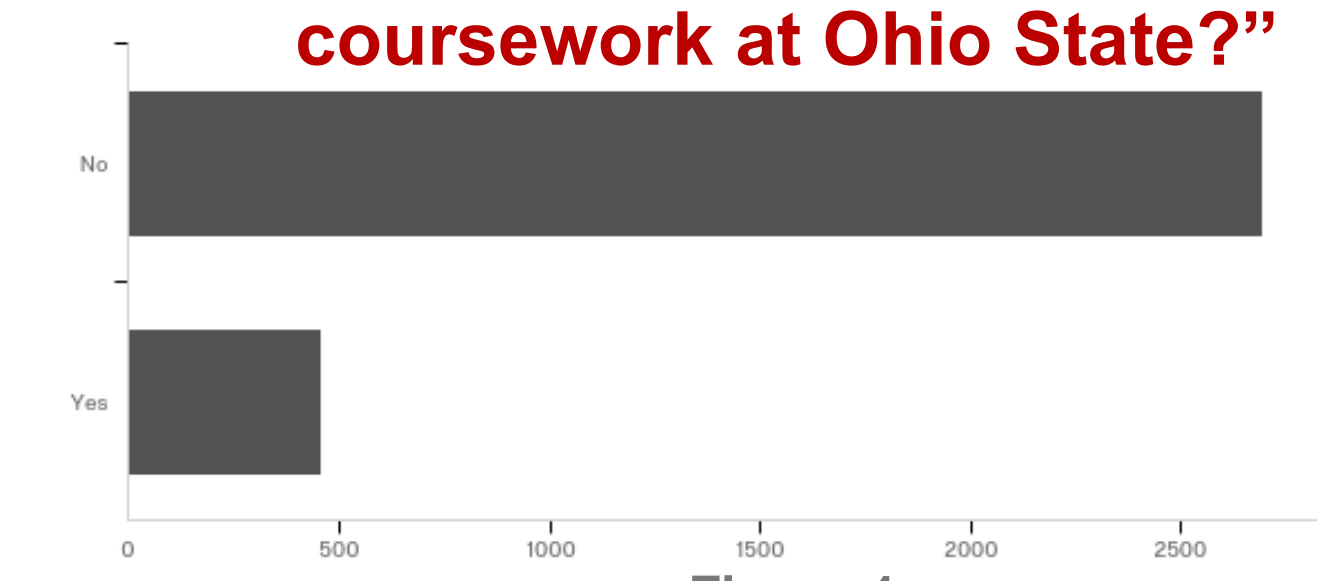


Figure 4.

Results to "Please Share your Recommendations for how Ohio State Can Better Communicate about the Breadth of Academic Programs Relating to Sustainability"

Recommended Method	Student Responses
1) Advisors	610
2) Orientation	570
3) Emails to accepted students	352
4) Advertising	218
5) Social Media	196
6) Required GE	82
7) Flyers and Posters	76

Table 2.

Results to "Which of the following themes/topics would you like to know more about through classes, activities, and organizations?"

Theme/Topic	Responses
1) Clean Energy	1920
2) Sustainable Food Systems	1749
3) Climate Change	1732
4) Sustainable Technology & Innovations	1392
5) Sustainability in Business	1275
6) Water Quality	1204
7) Waste	1162
8) Clean Water Security	1152
9) Environmental Policy	1064
10) Transportation	1043
11) Sustainable Land Use	962
12) Biodiversity	877
13) Agriculture	699
14) Soil Health	293

Table 3.

## RECOMMENDATIONS:

- Establishment of a search by interest database for available programs
- Establishment of clean energy economics undergrad program
- Creating a sustainability GE requirement for all undergrad students
- Engaging students early on through presentations in their orientation classes

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## Acknowledgments:

Gina Hnytka, OSU EEDS Program Director  
Robert Sprinkle, Ph.D. Associate Professor UMD  
Gannon Kese, UMD Student  
Elizabeth LaPorte, University of Michigan Program Officer  
Lisa Murphy, ASU Director of Academic Services