Proposal to Establish a Sustainability Shared Goal

Educational Policies Committee Sustainability Shared Goal Task Force

(Requesting Bloomington Faculty Council endorsement)

Preamble

This proposed Shared Goal started with our students. Of note, IU Student Government Enrolled Proclamation 110, passed in 2021[1], calls for the creation of a shared sustainability learning goal, arguing in part:

> "Indiana University students are graduating into a world that is undergoing rapid ecological degradation; The climate crisis is already impacting our lives and will continue to do so; Addressing the climate crisis will require drastic climate action from all industries."

(See Appendix A). During the December 7, 2021, meeting of the Bloomington Faculty Council at which the Proposal was first discussed, IU Student Body President Ky Freeman read statements of students that urged the BFC to endorse the Proposal. (Appendix B) Students explained that sustainability and climate are part of the world that they will enter upon graduation, not just personally but professionally. They ask us as educators for the tools to confront these existential challenges.

Leo Banks, IUSG Director for Sustainability, powerfully told the BFC members, the BFC Executive Committee, and the interim Provost[2]:

> "Climate change … is *the* defining issue for our generation. If we don't solve it, it won't be solved. This is something that needs to be addressed in our education."

Our students are not alone in these concerns. Notably, in 2020, *this* body passed the BFC Resolution for Enhancing Sustainability at IU Bloomington, stating, "The BFC will work to … actively support … both current and future academic, research, and service programs in and related to sustainability." (Appendix C). The IU Bicentennial Strategic Plan contained the language aligned with these goals:

Core Values:

- "Sustainability, stewardship, and accountability for the natural, human, and economic resources and relationships entrusted to IU"

Strategic Priorities:

- "Developing sustainability understanding through comprehensive programming and engagement with the campus as a laboratory for sustainable practices"

Indiana University, its faculty, administrators, and students have a stated commitment to sustainability education. BFC members, acting as independent representatives of the faculty, should affirm this commitment.

As a final note, the Sustainability as a Shared Goal Task Force (hereinafter, the Task Force) stresses that the Proposal set forth below does *not* require any department or school to create a new course *nor* a new course requirement. It asks for curricular review, offers consultation, and recommends curricular innovation, such as including sustainability-related data sets in courses focused on quantitative learning, connecting study of policymaking to those focused on environmental justice and climate action, or contemplating historical

[1] IU Graduate and Professional Student Government passed a similar resolution to that of IUSG, also in 2020.

[2] A recording of the December 7, 2021, BFC Meeting can be accessed here. Mr. Banks's comments begin at 1:41:50.

engagement with the rights of nature. Thoughtful educators will surely find creative and meaningful ways with which to make connections to sustainability in their classrooms.

The Task Force appreciates your consideration and welcomes your questions and concerns. Please contact Sarah Mincey, Brian Winterman, or Kelly Eskew to discuss further.

~~~~~

Introduction

There is a pressing need to bolster Indiana University Bloomington's General Education (Gen Ed) requirements for undergraduates to include sustainability literacy. The United Nations Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report warns that we are on track to reach 2.7 degrees Celsius of global warming (4.86 F) by 2050. This is a catastrophic prediction from the world's scientists. UN Secretary General António Guterres called the Report "a red alert for the planet." IU President Pamela Whitten recently stated that "Indiana University [is] actively finding solutions, leading conversations, and engaging the community locally and internationally" on the issue of climate change. A Shared Goal on Sustainability continues this important commitment and progress.

Institutions of higher education, like IUB, are uniquely positioned to develop an educated citizenry to address the existential crisis of global environmental change. Many of IUB's peer institutions have implemented general education requirements focused on sustainability literacy - Michigan State, the University of Minnesota, and the University of Nebraska among them. Indiana University should not be left behind. Thus, a multi-disciplinary task force that included students was convened by the Educational Policies Committee (EPC) of the Bloomington Faculty Council (BFC) to develop a proposal on a Sustainability Shared Goal.

The following suggested Shared Goal policy is based on learning outcomes suggested by the Association for the Advancement of the Sustainability in Higher Education (AASHE). It neither requires the addition of a new course, nor additional credit hours, but can be, the Task Force believes, implemented through current curricular offerings, potentially with more explicit reference to core concepts in most units and the innovative curricular adjustments that engaged faculty are always engaged in, year over year. If approved, the Task Force recommends that an implementation group, with representatives of the schools, be convened to continue that discussion.

Definitions

Sustainability, as defined by the United Nations is the reconciliation of environmental, social, and economic demands – the "three pillars" of sustainability – for the immediate and future wellbeing of individuals and communities.

Sustainability literacy is an integrated, interdisciplinary understanding of the interactions between people and the environment to improve well-being, ensure equity for present and future generations, and safeguard the planet's life-supporting ecosystems. Students will be able to define sustainability and major sustainability challenges; understand carrying capacity of ecosystems; apply concepts of sustainable development to address global sustainability challenges; and evaluate actions through a systems perspective that acknowledges the interconnections between the economy, social institutions and the environment.
~~~~~

Example learning outcomes

Academic units will evaluate, monitor, and regularly report on the achievement of sustainability literacy among their students.

The sustainability learning outcomes suggested by AASHE are derived by experts in the field and include the following (see Appendix D for examples of accounting of program learning outcomes and competencies). It is recommended that schools, programs, and courses work from these learning outcomes as they develop and customize outcomes for their own students:

1. Students will be able to define sustainability and identify major sustainability challenges;

2. Students will understand the concept of carrying capacity of ecosystems;

3. Students will be able to apply concepts of sustainable development to address sustainability challenges in a global context; and,

4. Students will identify and evaluate their professional and personal actions with the knowledge and appreciation of interconnections among economic, environmental, and social perspectives. Or "students will be able to evaluate actions through a systems perspective that acknowledges the interconnections between the economy, social institutions and the environment."

These example learning outcomes are referred to as the Sustainability Learning Outcomes, or LOs, below.

Oversight of Implementation (and beyond)

For the first two to three years, the task force recommends that the BFC establish a subcommittee of the General Education Committee (GEC) to oversee the implementation of the sustainability shared goal, henceforth referred to as Implementation Working Group. The Implementation Working Group, which may benefit from including the continued service of the Shared Goal Task Force and its leadership, to:

a) Provide guidance to schools as they evaluate and report on sustainability in their curricula,
b) Gather reports from schools,
c) Offer feedback to schools regarding ways to improve sustainability literacy,
d) Summarize evaluation reports from across campus in order to provide a broader view of sustainability literacy and the approaches taken by each school,
e) Advise BFC and other relevant units on ways to improve sustainability literacy, and
f) Collaborate with the Office of Sustainability and other units to assess improvements in literacy over time and stay abreast of sustainability literacy standards and practices.

After a period of implementation, oversight might be turned over to the GEC or perhaps a subcommittee of GEC that could evaluate all shared goals.

Implementation & Timeline

The task force has identified three most likely avenues for students to learn about sustainability:

1. General Education Courses: The task force worked with Bloomington Assessment & Research (BAR) to create a data dashboard that shows what students by school and major have taken sustainability-related Gen Ed courses (see Appendix E). As noted above, around 25% of IUB undergraduates learn about sustainability through Gen Ed courses. These courses were evaluated and determined as sustainability courses by the Office of Sustainability in accordance with the standards by the Sustainability Tracking and Assessment Rating System (STARS), the primary sustainability metric for higher education.

2. Program-specific Courses: Many undergraduate programs teach about sustainability in their own courses and in the context of their discipline, which is the ideal way for students to learn these concepts.

3. Co-curricular Activities: Some schools may already offer co-curricular activities that teach sustainability.

After policy adoption, the Task Force recommends that during AY2022-2023, schools evaluate to what degree sustainability literacy is being taught to their students and identify opportunities to improve. The results of this evaluation should then be reported to the Implementation Working Group, which will offer feedback to units. By AY2023-2024, schools should have a long-term plan for evaluating, monitoring, and reporting changes in sustainability literacy learning opportunities among their students.

Evaluation, Monitoring, and Reporting

Each school will develop a plan to evaluate and monitor sustainability literacy in their unit, based partly on guidance from the Implementation Working Group. This plan will focus primarily on the teaching and learning of the Sustainability Learning Outcomes.

In addition to the Sustainability Learning Outcomes, the Task Force recommends that programs and instructors use the course-level learning outcomes suggested by the Task Force as guidance at the course and program level (Appendix F).

After the initial evaluation report has been submitted, schools should continue to evaluate, monitor, and report on a regular basis to be determined by the schools along with the Implementation Working Group.

Sustainability as a Shared Goal: Discussion and Process

Justification

The climate crisis - an existential crisis as defined by the Paris Agreement on climate change (2015); the International Panel on Climate Change Report (2018 and 2021); and the Fourth National Climate Assessment Report by the US Global Change Research Program (2018) - places a moral obligation on institutions of higher education to act to ensure graduates have the knowledge and skills to contribute to collective sustainability solutions. While not everyone can be or should be a sustainability professional, everyone should understand the basic principles of sustainability, just as we would hope every student leaving IU understands the nature and value of inclusion and equity without having to be a professional in gender studies or community- based justice in order to contribute to the public good.

At IU, we are well positioned to achieve this basic understanding among our graduates given that there is grassroots interest, expertise, and resources for sustainability education across thedisciplines at our institution. A 2019 IUSG survey found that 85.6% of IUB students believe their major already addresses the three tenets of sustainability – economic, social, and environmental sustainability (Appendix G).Indeed, this shared goal is readily attainable given myriad curricular and co-curricular opportunities at IUB; 61 departments already offer sustainability related courses according to the University's sustainability reporting. And of those courses, at least 34 are General Educationclasses. According to data from AY16-20, close to 25% of IUB undergrads already take one of those sustainability related Gen Ed courses during their undergraduate experience. (Appendix E). IUB faculty expertise runs deep in sustainability – over 160 faculty from across ten schools are affiliates of the Integrated Program in the Environment and the Environmental Resilience Institute where sustainability scholarship is a primary focus.

Despite these significant resources, IU lacks an explicit focus on sustainability among our general education learning outcomes which earns the university a "failing grade" of 1.92/8.00 in the Associations for the Advancement of the Sustainability in Higher Education (AASHE) Sustainability Tracking, Assessment & Rating System (STARS). AASHE is the leading organizations focused on sustainability in higher ed, empowering higher education faculty, administrators, staff and students to be effective drivers of sustainability innovation. The organization provides the STARS ratings, a transparent, self-reporting framework for colleges and universities to measure their sustainability performance. Among the components measured within STARS are sustainability learning outcomes (Appendix H), a component that can be measurably improved through the initiative outline herein.

Task Force Membership

This task force was strategically assembled to include expertise in sustainability education standards and practices, a variety of subject areas in the undergraduate curriculum, course andprogram design and evaluation, assessment of student learning outcomes, best practices in teaching and learning, and the background and purpose of General Education Shared Goals.

Members include Sarah Mincey, Environmental Resilience Institute and Integrated Program in the Environment (co-chair); Brian Winterman, IUB Libraries (co-chair); Andrew Predmore, University Director of Sustainability; Andrew Libby, Human Biology; Mary Embry, Apparel Merchandising; Kelly Eskew, Business Law and Ethics and Chair of the Campus Sustainability Advisory Council; Bailey Hillis, IPE UndergraduateAssistant; Amani Khoury, IUSG Sustainability Coordinator.

Guiding Principles

The work of the task force was informed by the following principles, which we hope will make implementation of a sustainability shared goal more practical for units as well as more meaningful and substantive for learners.

Defining "Required": The Task Force suggests that the best approach to requiring a sustainability shared goal is to require schools and programs to evaluate, monitor, and report on their efforts to teach sustainability rather than requiring students to take a singlecourse or module, though we acknowledge that the single course or module approach might be the most viable approach for some schools or programs.

Effectively Learning Sustainability: There are multiple aspects of sustainability that are important for students to learn. The Task Force has focused on approaches that try to ensure students learn multiple aspects of sustainability to meet the shared goal rather thana single module or exercise. Also, the task force thinks that, whenever possible, sustainability is most effectively learned iteratively and in the context of a discipline.

Appendices

A. Indiana University Student Government Congress Enrolled Proclamation 110, approved March 20, 2021: "A PROCLAMATION calling for the creation of a shared sustainability learning goal across all Indiana University departments"

B. Student statements on Sustainability as a Shared Goal, presented by IUSG President Ky Freeman, at the December 7, 2021, meeting of the Bloomington Faculty Council

C. Bloomington Faculty Council Resolution for Enhancing Sustainability at IU Bloomington, April 27, 2020

D. Examples of program evaluations

E. Screenshot of Dashboard for Tracking Enrollment in Sustainability Gen Ed Courses

F. Suggested Sustainability Learning Objectives and Competencies

G. Sustainability Survey Report/IUSG Data Collection Project

H. Advancement of Sustainability in Higher Education (AASHE) Sustainability Tracking and Rating System (STARS) Learning Outcomes

APPENDIX A

Indiana University Student Government
Congress Enrolled Proclamation 110

PR.20-21-21
[Spring CEP 110. Approved March 20, 2021.]

A PROCLAMATION calling for the creation of a shared sustainability learning goal across all Indiana University departments.

WHEREAS, Indiana University students are graduating into a world that is undergoing rapid ecological degradation;

WHEREAS, the climate crisis is already impacting our lives, and will continue to do so;

WHEREAS, addressing the climate crisis will require drastic climate action from all industries;

WHEREAS, an understanding of the climate crisis will be imperative for all students because every industry will need to abide by government regulations that mitigate the effects of climate change;

WHEREAS, according to a 2019 Princeton Review survey of nearly 12,000 college applicants, approximately 64 percent consider a school's environmental commitment when deciding where to attend[1];

WHEREAS, the current shared learning goals for Indiana University are listed as follows: intensive writing, information fluency, diversity in the U.S., and enriching educational experiences;

WHEREAS, the Bloomington Faculty Council (BFC) is proposing that Indiana University creates a shared learning goal for sustainability;

WHEREAS, through the Association for the Advancement of Sustainability in Higher Education (AASHE), Indiana University received a Gold rating on February 26th, 2020, but by these same standards, IU received a 26.99/40 in the Curriculum section of the report[2];

WHEREAS, within the Curriculum section, the only point deductions occurred within subsections titled "Academic Courses" and "Learning Outcomes," which scored a 7.07/14.00 and 1.92/8.00, respectively;

WHEREAS, Only 23.94% of students graduate with an understanding of sustainability, which the Sustainability Tracking, Assessment, and Rating System (STARS) defines as "the interdependence of

[1] https://sheltongrp.com/students-make-sustainability-matter-in-higher-ed/

[2] https://reports.aashe.org/institutions/indiana-university-bloomington-in/report/2020-02-26/

ecological systems and social/economic system" with examples including but not limited to:

- "Students will be able to define sustainability and identify major sustainability challenges."
- "Students will have an understanding of the carrying capacity of ecosystems as related to providing for human needs."
- "Students will be able to apply concepts of sustainable development to address sustainability challenges in a global context."
- "Students will identify, act on, and evaluate their professional and personal actions with the knowledge and appreciation of interconnections among economic, environmental, and social perspectives"[3]; and

WHEREAS, the addition of a shared sustainability learning goal would significantly increase the number of students graduating with an understanding of sustainability to rates that would also increase the university's Curriculum score under AASHE; now, therefore, be it

RESOLVED that as an international leader in education and research, Indiana University should recognize that solving the climate crisis will be the most pressing challenge for this generation;

RESOLVED that Indiana University should respond to this challenge by providing a comprehensive education surrounding sustainability, while dedicating resources to innovate within the field of sustainability practices, integrating their findings into their sustainability education;

RESOLVED that Indiana University should give serious consideration towards the BFC's Educational Policies Committee Sustainability Shared Goal Task Force and work to implement their recommendations;

RESOLVED that IU should include the STARS standards for sustainability-focused learning outcomes, as stated in the tenth "whereas" clause of this proclamation, in their creation of a shared sustainability learning goal;

RESOLVED that the BFC should strongly consider student opinion of other important topics that we demand to see in a shared sustainability learning goal, which is as follows:

1. Intersectionality between the climate crisis and social justice issues;
2. Federal sustainability initiatives and how they will impact local, national, and global communities;
3. Systems thinking:
    1. corporations as large contributors to the climate crisis;

[3] https://drive.google.com/file/d/1MUo_qIaqHXQYJaKGRwE_1hv7h_bnJrCR/view

2. sustainable business practices; and
3. greenwashing;

4. Accountability of institutions with sustainability initiatives;
5. Full alignment with the STARS standards; and

RESOLVED that following the adoption of this proclamation, the IUSG Executive Branch will send the proclamation to the Bloomington Faculty Council in general and directly to the BFC's Educational Policies Committee Sustainability Shared Goal Task Force working on this project within the week that this resolution is adopted by the Congress.

APPENDIX B

Student statements on Sustainability as a Shared Goal

Presented by IUSG President Ky Freeman, at the December 7, 2021, meeting of the Bloomington Faculty Council

This initiative has had strong student support since it was first introduced. The IU Student Government passed a resolution unanimously asking for a sustainability shared learning goal last spring. The strong support for the initiative is partly because there won't be any added burden to the student body since no additional credit hours would be required if this were approved. We will be graduating into a world impacted by climate change, and we should all have a thorough understanding of this crisis in order to navigate and address it in a just way. The student body has shown our support of this initiative as being an effective way to provide us with an understanding of the climate crisis.

Indiana University prides itself on giving students a well-rounded education, preparing them for whatever is to come in the real world. Given the interconnectedness of the climate crisis with our economy, social, and political institutions, we must work across sectors and across disciplines to create a more sustainable world for all. This begins in the classroom. By giving students the opportunity to learn more about sustainability and environmental issues, we are ensuring that our future leaders and workforces have the tools and skill sets to address the increasing impacts of a changing climate within their industry. For this reason, I strongly support the Sustainability Shared Goals policy proposal. As a society, we must change our relationship with the environment. Climate change knows no boundaries or borders, and we can no longer see ourselves separate from what is happening to our planet. Educating ourselves on how our actions impact the world around us, as well as understanding environmental justice and equity issues, is the first step in making real progress for a better future.

I would like to emphasize the utmost importance of interdisciplinary sustainability education and how new Sustainability Shared Goals can help achieve that for our students. Learning about environmental justice (in conjunction with environmental injustice/racism), the impact of our economy on the environment, and our relationship with the land over time are all vital ways in which students can see sustainability as more of a holistic aspect of society. One of the most impactful parts of the Sustainability Scholars Program for me was when we discussed a circular economy and creating playgrounds and furniture with the future in mind, where the things we create involve a relationship and aren't disposed of at the end of the journey. I believe that updated shared goals for sustainability can help our students grasp how the environment is relevant to them, even if it's just through a newly updated lesson within their discipline.

Resolution for Enhancing Sustainability at IU Bloomington

Rationale for putting forward the resolution

1. Whereas the Paris Agreement on climate change (2015); the International Panel on Climate Change Report (2018); and the Fourth National Climate Assessment Report by the US Global Change Research Program (2018) have all warned of the catastrophic dangers to humans and the earth if climate change is not addressed;
2. Whereas Indiana and other Midwest legislators are leading and participating in the bipartisan Climate Solutions Caucuses in the U.S. Senate and U.S. House;
3. Whereas IU is internationally recognized as an Innovative University in Reuters' Top 100: The World's Most Innovative Universities;
4. Whereas Core Value 7 of the IU Bicentennial Strategic Plan commits to "Sustainability, stewardship, and accountability for the natural, human, and economic resources and relationships entrusted to IU";
5. Whereas Action Items of the Strategic Plan include the goal "to solidify IU's focus on efficient and environmentally conscious campus design and operation";
6. Whereas the IUB Bicentennial Priority One includes "Responsible Stewardship" and
   a. "developing sustainability understanding through comprehensive programming and engagement with the campus as a laboratory for sustainable practices" (Bicentennial Priority 1, Objective 1, Number 2e);
   b. "pursuing and supporting sustainability on our campus" (Bicentennial Priority 1, Objective 3, Number 1c);
   c. "support[ing] innovative campus 'living laboratory' initiatives that provide opportunities to integrate campus operations, faculty and student research, education, student life, and community engagement to applied, solutions-oriented sustainability research" (IU Bicentennial Strategic Plan, Principles of Excellence Three: IU Continuing Priorities Number 3)
7. Whereas the mission of several IU Bloomington Schools and Programs includes education about sustainability and developing global citizens;

8. Whereas, recognizing how current and future university students have made climate concerns and sustainable practices a high priority, as evidenced, for example, by the international student-led Global Climate Strikes;

Now, therefore be it resolved that

the IU Bloomington Faculty Council, representing the full IUB faculty, will work cooperatively with faculty, administration, staff, student constituent groups, the City of Bloomington, Monroe County, and relevant governmental authorities to:

1. develop a campus-specific climate action plan by 2023, with reviews every 5 years;
2. prioritize sustainability planning and the climate action plan as major, long-term goals of planning implementation on the IU Bloomington campus;
3. actively support the work of the IU Office of Sustainability (Sustain IU), and both current and future academic, research, and service programs in and related to sustainability;
4. encourage Sustain IU to ensure diverse representation across faculty, staff, administration and students on the Sustain IU advisory board, continue to incorporate BFC representation, and continue to work with the IU Vice President for Capital Projects, and the City of Bloomington Commission on Sustainability to ensure effective and efficient progress towards local and regional sustainability;
5. request that the Sustain IU director, the BFC representatives on the Sustain IU advisory board, and the Vice President for Capital Projects report back to the BFC annually on campus progress towards carbon neutrality;
6. anticipate the post-carbon, sustainable economic era and preserve fiscal responsibility while pursuing the goal of carbon neutrality;
7. create effective synergy between administration, faculty, staff, and students as we implement and model sustainable best-practices and use of renewable resources to the IU Bloomington campus, student body, and wider community, for the next 50 years and beyond; and
8. as a campus, collaborate on achieving the goal of becoming carbon neutral by 2030, ahead of what is advocated by the International Panel on Climate Change Report.

Appendix D - Human Biology Evaluation for Sustainability

Sustainability is not a central learning outcome in the Human Biology (HUBI), though sustainability is taught in substantive ways in some of the courses in our 3-course core sequence.

The Human Biology Program is an interdisciplinary major in the College of Arts & Sciences that attempts to provide students with a scientific understanding of human biology and the ways it is shaped by, understand, and interpreted within a social and cultural context. At the center of the Human Biology curriculum is a sequence of 3 core courses – *B200: The Intricate Human; B300: Ethical Dilemmas; B400: Complex Problems of Humanity* -- that attempt to show how the natural sciences, the social sciences and the humanities investigate problems related to human biology differently while also demonstrating the ways in which different disciplinary modes of inquiry can be combined constructively to address complex problems. There are many pathways through the B200, B300 and B400 core sequence, some with considerable emphasis on sustainability, some with less or none at all.

Sustainability is not an explicit learning outcome of the Human Biology curriculum as demonstrated by its absence in the Program Learning Outcomes:

Program Goals	Student Learning Outcomes	HUBI B200	HUBI B300	HUBI B400
1. Scientific Reasoning	1.1 Use the scientific method to answer a question related to human biology	I/A	A	
	1.2 Evaluate others' research and interpretation of results	B	I	A
	1.3 Connect scientific findings to relevant public issues or problems	B	I	A
	1.4 Distinguish between evidence-based reasoning and opinion	I	A	A
2. Knowledge of human biological processes	2.1 Demonstrate knowledge of human anatomy or physiological systems	B		
	2.2 Demonstrate knowledge of evolutionary theory	B/I		
	2.3 Provide examples of how evolutionary processes have contributed to human biology and human biological variation	B/I		
	2.4 (BS) Demonstrate knowledge at sub-organismal levels and place human biology in context of processes common to all life forms			
3. Interdisciplinarity & synthesis	3.1 Show how the natural sciences, the social sciences, and the humanities identify, define and address problems related to human biology differently	B	I	A
	3.2 Demonstrate an ability to combine different modes of inquiry	B	I	A
	3.3 Evaluate the benefits and limitations of different disciplinary approaches to knowledge	B	I	A
4. Collaborative problem solving	4.1 Work together with others to form a strategy to address a human biological problem or research a question in human biology	B/I	I	A
	4.2 Give constructive feedback to others	B	I	A
5. Communication/writing	5.1 Demonstrate knowledge of a topic in human biology within the context of what is already known	B	I	A
	5.2 Present evidence and arguments from the scientific literature and articulate research clearly in written and oral form to a non-specialist audience	B	I	A
6. Ethical Reasoning	6.1 Identify what ethical issues are raised by a particular problem.		B	A
	6.2 Identify the implications of the ethical positions you take		B	I
	6.3 Use evidence-based arguments to advocate for particular positions		B	I
7. Civic Engagement	7.1 Identify the role of science in public discourse and policy	B	I	A
	7.2 Exhibit social responsibility and active citizenship by using knowledge and skills to direct scientific inquiry towards the public good		B	I

There are, however, a number of courses in the core sequence that have sustainability as a central focus within the larger framework of the Program Learning Outcomes. These courses are:

B200: How Biology and Culture Influence Obesity and Hunger (Bashey-Visser/Libby)
B200: The Science and Politics of Climate Change (Wasserman/Libby)
B300: Living Downstream (Reynolds/Libby)
B400: Welcome to the Anthropocene (Wasserman)
B400: Food Politics (Libby)

If students were to take a B200, B300, B400 core sequence that includes one, or more, of these courses, then they would receive a healthy dose of content related to sustainability, both in theory and in some cases in practice, through service-learning. For instance, students in the *B300 Living Downstream* course that Heather Reynolds and I teach would address every single Program level learning outcome as well as the secondary learning outcomes. Other courses like the *B200: Obesity and Hunger* course that Farrah Bashey-Visser and I teach would address, perhaps, ½ of the Program-level learning outcomes, but not the other ½.

The same is true for the course-level competencies and associated learning outcomes.

There are, however, many other paths through the Human Biology core sequence that students could take depending on which versions of the core courses are being taught in any given semester. These other core courses include:

B200: Epidemics (Bashey-Visser/Maglen)
B200: Sense and Smell (Schickore/Barwich)
B300: Eugenics and Genetic Engineering (Hanratty/Libby)
B300: Empathy (Breithaupt/Barwich)
B300: Gestation (Berndtson/Furey)
B400: AIDS (Hardy)
B400: Cancer (Hagar)
B400: Science and the Media (Comfort)
B400: Microbes and Evolution (Bashey)

If students were to take a B200, B300, B400 core sequence from within this list of courses, they would not have any course content related to sustainability, or if there were, it would be incidental and not explicitly framed within the context of sustainability.

Appendix D - Kelley School Evaluation for Sustainability

Kelley School of Business Sustainability LOs in the Undergraduate Programs

Program:

The Kelley School's undergraduate curriculum does not contain a stated requirement or a learning outcome that mandates that students study sustainability. However, the required BUS-G202 [Business, Government, and Society] course includes sustainability and "triple bottom line" issues as part of non-market risks to the enterprise.

If we use a broad definition of sustainability as found in the United Nations Sustainable Development Goals, there is arguably additional core content through Kelley's Compass program, which includes engagement with diversity, equity, and inclusion, as well as the required business ethics course [BUS-L375/376], which spends five weeks on DEI topics.

Kelley offers a major in Sustainable Business. The major also does not have stated set of learning outcomes. Required courses include Sustainable Enterprise [BUS-G316] and Non-Market Risk Consulting [BUS-G456]. The degree is multidisciplinary. The business electives include:

- BUS-L302 Sustainability Law & Policy
- BUS-L318 Business & Poverty Alleviation
- BUS-P316 Sustainable Operations
- BUS-M360 Sales for Social Impact
- BUS-G406 Business Enterprise and Public Policy
- BUS-L355[1] Topic: Renewable Energy Law and Policy

Non-business electives are:

- GEOG-G315 Environmental Conservation
- GEOG-G448 Capitalism and Nature
- SOAD-D203 Green Building Concepts and Technologies
- SOAD-M416 Sustainability in Product: Fashion Design, Merchandising, and Retailing
- SPEA-E363 Environmental Management
- SPEA-V450 Contemporary Issues in Public Affairs
- SPH-O360 Human Health and Natural Environments

In Kelley, a Shared Goal on Sustainability could be incorporated through, and may already be met by, the G202 course noted above. Kelley can and already does contribute to providing electives that would meet a requirement that all IUB students complete a course in sustainability through three of

[1] Note that X355 course numbers indicate experimental courses. If successfully enrolled for at least two years, faculty may petition the Undergraduate Policy Committee and the chairs for approval as a permanent course.

its current offerings: L302, L318, and L355. There is some limited capacity to expand these courses to offer additional sections.

Describe how courses in the program teach the individual CLO's. Provide course assignments, exercises, etc. if possible.

While faculty may describe their CLOs in slightly different terms, required and business school electives generally include (with connection to Kelley Learning Goals):

1) Explain how sustainability impacts business and why business should care about sustainability issues. *(Learning Goal 1: Integrative Point of View)*

2) Evaluate the role that US and international laws play in making sustainable business decisions*. (Learning Goal 7: Cultural Awareness and Global Effectiveness)*

3) Assess trends relating to the environmental, social, economic, and ethical dimensions of sustainable development (*Learning Goal 3: Critical Thinking and Decision-Making*)

4) Construct sustainable alternatives to current business practices (or improvements to ongoing sustainable business initiatives)
(*Learning Goals 3: Critical Thinking and Decision Making in Business*)

Then each course includes CLOs related to specific content (i.e., law courses teach law).

The majority of sustainability courses within Kelley involve service learning/microconsulting [G316, L302, L355, M360]. Additionally, courses include case studies, case competitions, team projects, business plan development, and business analysis around sustainable enterprise and non-market impacts. Note that the increased focus on climate action by major private investment firms is moving climate concerns from the area of "non-market" to market risk.

What co-curricular activities teach either PLOs or CLOs?

The Kelley Institute for Social Impact ("KISI") is the home for a number of students organizations that conduct educational programming and do microconsulting that complements the sustainability curriculum and drives sustainability initiatives in the business school. NetImpact studies and consults on social and environmental causes. Trockman Microfinance Initiative does educational program and service projects on poverty alleviation through financial measures. Alternative Break Program participants identify social and environmental issues, plan service trips, and conduct educational programming in advance of travel. Past trips have included focus on urban poverty, environmental degradation in the Everglades, and other trips both directly focused on environment and broadly connected to the SDGs. Civic Leadership Development, 180 Degrees Consulting, and Social Enterprise Engagement at Kelley also meet this description.

The KISI office sponsors over 80 programs a year. In 2019-2020, students gave nearly 13,000 hours of service.

Appendix D - SOAAD Evaluation for Sustainability

Eskenazi School of Art, Architecture, + Design

The Eskenazi School lies within the College of Arts & Sciences, granting six undergraduate majors as follows:

B.A. Studio Art
B.F.A Studio Art
B.A. Fashion Design
B.S. Comprehensive Design
B.S. Interior Design
B.S. Merchandising

Each program maintains their own learning goals and outcomes, with some commonalties across degree types and similar areas (design and art, merchandising and fashion). The School does have a *Creative Core,* where every Eskenazi student takes an introductory class, A100: Introduction to Art, Design, and Merchandising. Other courses in the Creative Core are required by degree program to fulfill introductory outcomes, except for Merchandising.

In the review of the learning goals and outcomes for three degree programs, the Studio Art BA, Fashion Design BA, and the Merchandising BS, sustainability is treated very differently. The Merchandising program recently embarked on a learning outcomes review in Fall 2019, reconsidering how the curriculum prepares students for changing roles in the retail industry. This review was paused by the pandemic, at a point where the core curriculum would be re-imagined to address adjusted outcomes. Previous to this sustainability was couched in one goal labeled “sustainability/social responsibility”, as is shown below, but without specific outcomes related to the goal. Outcomes are tracked through the curriculum using a system of coding them as *introduced, emphasized,* or *reinforced.* A current curriculum analysis showed the sustainably/social responsibility goal as being introduced in four core classes and reinforced in one, missing a point of emphasis. In the adjusted outcomes, learning goal 5 more specifically refers to sustainability as a program learning outcome.

	LG5. SUSTAINABILITY and SOCIAL RESPONSBILITY	
	LO5a. Social responsibility/sustainability	value decision-making integrated in social, environmental, and economic goals.
	LO5b. Ethical behavior and decision-making (industry)	Understanding factors that impact ethical decision-making and behavior
	LO5c. Ethical behavior and decision-making (individual-personally)	Practice ethical decision-making and behavior, both personally and professionally
	LO5d. Diversity, equity and inclusion	Understand and value diversity, equity and inclusion

Currently the Merchandising program offers an elective in sustainability, M416 Sustainable Products. When created, sustainability was a small part of the retail industry, but now a conversation and initiative

that has grown, hastening the need for an understanding of sustainability to no longer be an elective choice, but a requirement of all graduates.

Interior, Fashion, and Comprehensive Design reference the same set of learning goals and outcomes, based on a broad understanding of design as a problem solving and creative process. Interior Design is governed by CIDA accreditation standards, and Comprehensive Design is a three year old program that is in many ways evolving curriculum as the program forms. Although not specifically referenced in program goals or outcomes, Fashion Design would consider sustainable design practices are offered throughout the program within courses, through use of digital technology and recycled materials. The program also offers two rotating overseas study programs with sustainability as a core concept. A 2019 survey comparing freshman, sophomores/juniors, and seniors understanding of sustainability concepts as they relate to fashion showed a general increase throughout the program with questions related to defining sustainability, behavior that impacts climate change, and energy use.

Interior/Fashion/Comprehensive Design

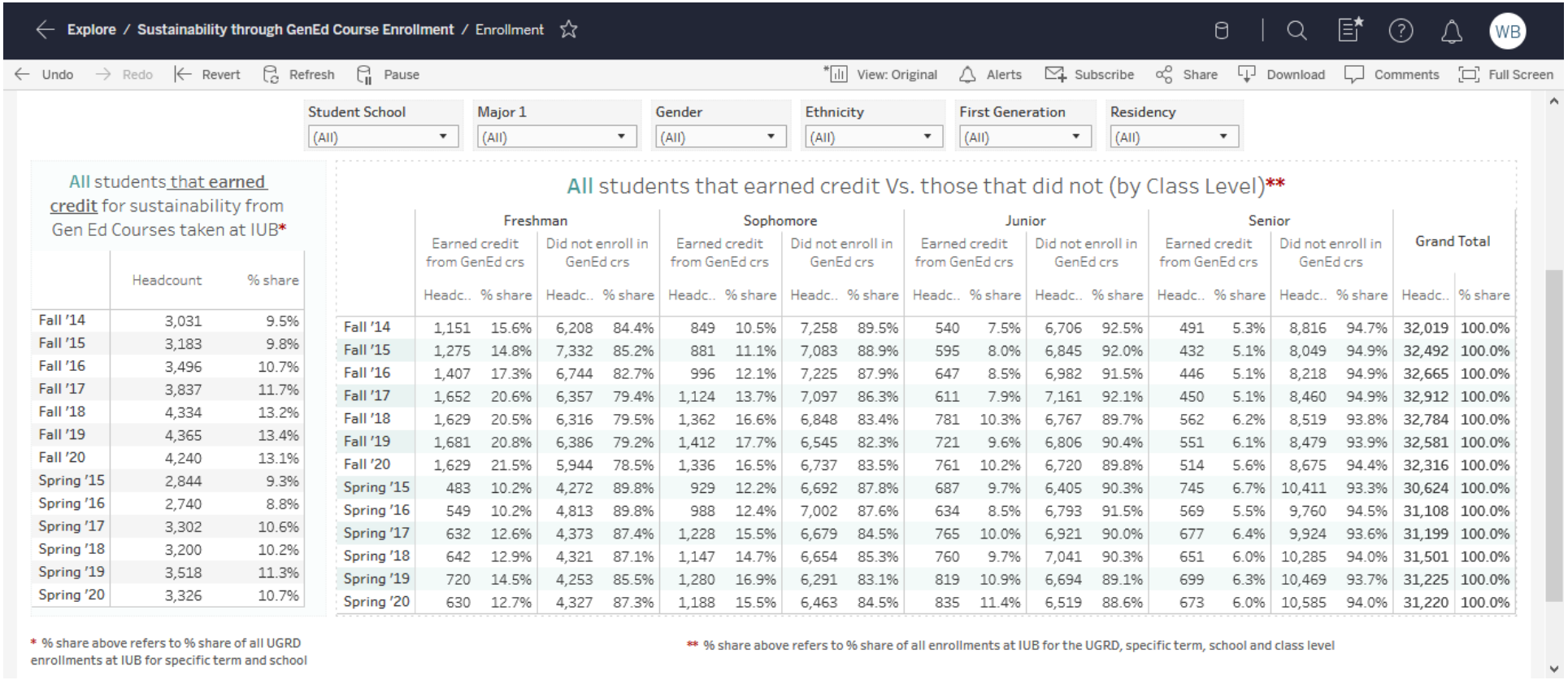
Program Goal	Student Learning Outcomes Students will be able to:
1. Information Literacy: Socio-economic, cultural, global, historical, environmental, perceptual & technical literacy	1.1. Be able to remember basic knowledge and vocabulary in a chosen field of study
	1.2. Be able to independently acquire and identify information: socio-economic, cultural, historical, environmental, perceptual & technical information
	1.3. Be able to understand information: socio-economic, cultural, global, historical, environmental, perceptual & technical information
	1.4. Be able to analyze information: socio-economic, cultural, global, historical, environmental, perceptual & technical information
	1.5 Be able to apply information: socio-economic, cultural, global, historical, environmental, perceptual & technical information in the evaluation and creation of design solutions
2. Problem Analysis: Quantitative, qualitative, and/or visual analysis	2.1. Explore opportunities using quantitative, qualitative and/or visual analysis, considering stakeholder needs
	2.2. Analyze and critically evaluate opportunities considering multiple points of view, individually, in disciplinary teams, and/or in transdisciplinary teams
	2.3. Analyze opportunities that emerge from intersections of disciplines
	2.4. Synthesize and establish criteria valuable to the generation of design options
3. Creative Solutions: Generate, propose and critically evaluate creative solutions	3.1. Using established criteria, practice collaborative adaptable decision-making in generating alternative solutions
	3.2. Critique design proposals
	3.3. Generate proposals that exhibit disciplinary proficiency, rigorous methodology, and ideational integrity
	3.4. Generate proposals that exhibit interdisciplinary proficiency by linking two or more areas
	3.5. Communicate and defend solutions via visual presentation, written presentation, oral presentation, and/or mathematical analysis
	3.6 Consider diverse critical feedback and integrate into creative solutions
4. Communicative Professional Practice	4.1. Be able to focus on developing proper design skills and utilizing them to get professional experience within the regional, national and international design community
	4.2. Be able to work with a variety of computer programs relevant to the professional design field and use the web as a basic research tool
	4.3. Be able to understand basic components of professional practice and related vocabulary/ terminologies relevant to professional design field
	4.4. Be able to express design ideas in a variety of communication techniques - oral, written and visual medias, and apply them to a range of purposes and professional environments

11/2/2017

Fine Art Studio Program Assessment

Program Goals for Studio Art	Parallel Student Learning Outcomes
1. Visual Literacy Ability to articulate & engage in creative ideas, history and theory, and core issues from a globally informed art perspective.	1A. Students should be able to identify stylistically and temporally major historical and contemporary works, and then synthesize ideas relating to broader cultural spheres and diversity. 2A. They should be able to recognize and apply major theoretical arguments to their own work and be able to debate them with both peers and faculty. 3A. They should also be able to apply discursive strategies and vocabulary to their creative ideas and debate.
2. Creative Tools & Applied Skill Ability to utilize media-specific skills to manipulate material and to explore art production. Ability to demonstrate an understanding of professional skills and methodologies particular to media/field, and connectivity between concept and media.	2A. They should exhibit competency in fundamental drawing and design skills and concepts. They should be able to draw and to use drawing as a conceptualizing tool. The definition of drawing in this context should not be limited to producing a likeness but should include skills such as planning, mapping, charting and creating hierarchies of information. As well, they should be able to design and organize a two-dimensional surface, effectively use color, work with three-dimensional space including tactile materials and to effectively work with the element of time and with time based media. 2B. As students progress through the program and develop as artists, they should be able to implement these skills and concepts and apply them to their chosen creative area. Students should be competent in their chosen area of study.
3. Substantive, self-directed artistic activity Ability to generate questions, analysis, and reflection in order to drive a personally effective, cohesive body of work.	3A. Students should be able to work with concepts and ideas surrounding their art. They should have an understanding of art history and theory and should be able to place their work within the context of their field/area of visual art. 3B. Students should be able to develop and implement an individually appropriate working process that results in a tangible group of works. Through faculty-student mentoring they should have a working understanding of time management, have fostered productive working habits, have competency of the physical management of studio space as well as materials and have some proficiency in self directed development of ideas and the arc of taking their work to completion.
4. Communicative Professional Practice Ability to critically analyze and organize ideas within the broader community; to understand communicative value and discover its avenues for output. Ability to address knowledge of historical references and contemporary comparisons, critical thinking and clear communication in written form.	4A. Students should be able to focus their art making skills and their knowledge of art history and theory to augment the totality of their creative production/activity. Students should have experienced active art production and a level of engagement needed to sustain an interactive or integrated relationship with the regional, national or international art community. 4B. Students should be computer literate, should be able to work with a variety of computer programs relevant to their field and to be able to use the web as a research tool. They should be able to utilize social technologies and use social media to advance their careers 4C. Students should be informed regarding to the world surrounding their chosen career paths and should be given the best information available in order to accomplish this. 4D. Students should be able to conduct research and present organized written work that uses vocabulary and art related terminology. Their writing should analyze their own positions as artists in relation to art historical and contemporary references.

Appendix E - Screenshot of Dashboard for Tracking Enrollment in Sustainability GenEd Courses



All students that earned credit for sustainability from Gen Ed Courses taken at IUB*

	Headcount	% share
Fall '14	3,031	9.5%
Fall '15	3,183	9.8%
Fall '16	3,496	10.7%
Fall '17	3,837	11.7%
Fall '18	4,334	13.2%
Fall '19	4,365	13.4%
Fall '20	4,240	13.1%
Spring '15	2,844	9.3%
Spring '16	2,740	8.8%
Spring '17	3,302	10.6%
Spring '18	3,200	10.2%
Spring '19	3,518	11.3%
Spring '20	3,326	10.7%

All students that earned credit Vs. those that did not (by Class Level)**

	Freshman				Sophomore				Junior				Senior				Grand Total	
	Earned credit from GenEd crs		Did not enroll in GenEd crs		Earned credit from GenEd crs		Did not enroll in GenEd crs		Earned credit from GenEd crs		Did not enroll in GenEd crs		Earned credit from GenEd crs		Did not enroll in GenEd crs			
	Headc..	% share	Headc..	% share	Headc..	% share	Headc..	% share	Headc..	% share	Headc..	% share	Headc..	% share	Headc..	% share	Headc..	% share
Fall '14	1,151	15.6%	6,208	84.4%	849	10.5%	7,258	89.5%	540	7.5%	6,706	92.5%	491	5.3%	8,816	94.7%	32,019	100.0%
Fall '15	1,275	14.8%	7,332	85.2%	881	11.1%	7,083	88.9%	595	8.0%	6,845	92.0%	432	5.1%	8,049	94.9%	32,492	100.0%
Fall '16	1,407	17.3%	6,744	82.7%	996	12.1%	7,225	87.9%	647	8.5%	6,982	91.5%	446	5.1%	8,218	94.9%	32,665	100.0%
Fall '17	1,652	20.6%	6,357	79.4%	1,124	13.7%	7,097	86.3%	611	7.9%	7,161	92.1%	450	5.1%	8,460	94.9%	32,912	100.0%
Fall '18	1,629	20.5%	6,316	79.5%	1,362	16.6%	6,848	83.4%	781	10.3%	6,767	89.7%	562	6.2%	8,519	93.8%	32,784	100.0%
Fall '19	1,681	20.8%	6,386	79.2%	1,412	17.7%	6,545	82.3%	721	9.6%	6,806	90.4%	551	6.1%	8,479	93.9%	32,581	100.0%
Fall '20	1,629	21.5%	5,944	78.5%	1,336	16.5%	6,737	83.5%	761	10.2%	6,720	89.8%	514	5.6%	8,675	94.4%	32,316	100.0%
Spring '15	483	10.2%	4,272	89.8%	929	12.2%	6,692	87.8%	687	9.7%	6,405	90.3%	745	6.7%	10,411	93.3%	30,624	100.0%
Spring '16	549	10.2%	4,813	89.8%	988	12.4%	7,002	87.6%	634	8.5%	6,793	91.5%	569	5.5%	9,760	94.5%	31,108	100.0%
Spring '17	632	12.6%	4,373	87.4%	1,228	15.5%	6,679	84.5%	765	10.0%	6,921	90.0%	677	6.4%	9,924	93.6%	31,199	100.0%
Spring '18	642	12.9%	4,321	87.1%	1,147	14.7%	6,654	85.3%	760	9.7%	7,041	90.3%	651	6.0%	10,285	94.0%	31,501	100.0%
Spring '19	720	14.5%	4,253	85.5%	1,280	16.9%	6,291	83.1%	819	10.9%	6,694	89.1%	699	6.3%	10,469	93.7%	31,225	100.0%
Spring '20	630	12.7%	4,327	87.3%	1,188	15.5%	6,463	84.5%	835	11.4%	6,519	88.6%	673	6.0%	10,585	94.0%	31,220	100.0%

* % share above refers to % share of all UGRD enrollments at IUB for specific term and school

** % share above refers to % share of all enrollments at IUB for the UGRD, specific term, school and class level

Appendix F - Suggested Sustainability Learning Outcomes

Sustainability-focused learning outcomes (Program-Level)

1. Students will be able to define sustainability and identify major sustainability challenges;
2. Students will understand the concept of carrying capacity of ecosystems;
3. Students will be able to apply concepts of sustainable development to address sustainability challenges in a global context; and,
4. Students will identify and evaluate their professional and personal actions with the knowledge and appreciation of interconnections among economic, environmental, and social perspectives. Or "students will be able to evaluate actions through a systems perspective that acknowledges the interconnections between the economy, social institutions and the environment."

Sustainability-supportive (secondary) learning outcomes (Program-Level)

1. Students will be able to demonstrate an understanding of the nature of systems.
2. Students will have an understanding of their social responsibility as future professionals and citizens.
3. Students will be able to accommodate individual differences in their decisions and actions and be able to negotiate across these differences.
4. Students will be able to analyze power, structures of inequality, and social systems that govern individual and communal life.
5. Students will be able to recognize the global implications of their actions.

Competencies and Associated Learning Outcomes (Course-Level)

1. Holistic Thinking
   a. Collectively analyze complex systems across different domains and across different scales.
   b. Consider interconnectedness through cascading effects and inertia.
   c. Identify intervention points.
   d. Anticipate future trajectories by analyzing feedback loops.
   e. Recognize the historical roots and embedded resilience of unsustainability and barriers to change.

2. Anticipatory Thinking
   a. Ability to collectively analyze, evaluate, and craft rich pictures of the future related to sustainability issues.
   b. Acknowledge unintended harmful consequences and intergenerational inequity.
   c. Ability to refine one's own future (visions, scenarios, etc.) in productive and explicit tension to status quo.

d. Ability to take personal responsibility for global issues that have human rights implications.
e. Recognize how personal actions at the local level can impact global phenomena.

3. Values Thinking Competency
    a. Ability to collectively negotiate sustainability values, principles, goals and targets.
    b. Gain knowledge to seek justice and equity.
    c. Maintain social-ecological integrity and ethics.
    d. Recognize critical issues of dissent.
    e. Navigate through unbalanced power relations.
    f. Recognize normalized oppressive structures.
    g. Recognize Implications of race, gender, class, ideology, spirituality, culture, language, religion, traditions on societal and ecological interactions.

4. Action-oriented Competency
    a. Ability to collectively design and implement transformative governance strategies toward sustainability.
    b. Ability to utilize policy and democracy to seek long term resilience.
    c. Ability to utilize professional and administrative abilities to solve sustainability issues.
    d. Understand how to negotiate ambiguities that arise in interactions with others over a range of issues.

5. Collective Competency
    a. Ability to facilitate collaborative sustainability research.
    b. Ability to negotiate with empathy.
    c. Capacity to understand and embrace diversity.
    d. Ability to engage with a wide variety of communities.
    e. Ability to work with other's different ways of knowing and communication.

Sustainability Survey Report
IUSG Data Collection Project
Findings Compiled by Madeline Garcia

Introduction:

Climate change is a pressing threat to people, ecosystems, and cities globally. With environmental protection remaining a hot button issue for upcoming elections and global climate summits, there is great pressure on governments, corporations, and large organizations to divest from fossil fuel industries and create sustainable changes with goals of reducing emissions and waste. This survey was conducted to gauge student interest in sustainability issues and take student opinions regarding institutional actions and changes that can be done to create a more sustainable IU. The overall student body at Indiana University is very passionate in sustainability. It should be noted that this survey received over double the responses of any survey conducted by the IUSG Data Collection Team this year, with **over 1,100 students responding in a short four-day period**.

Methodology:

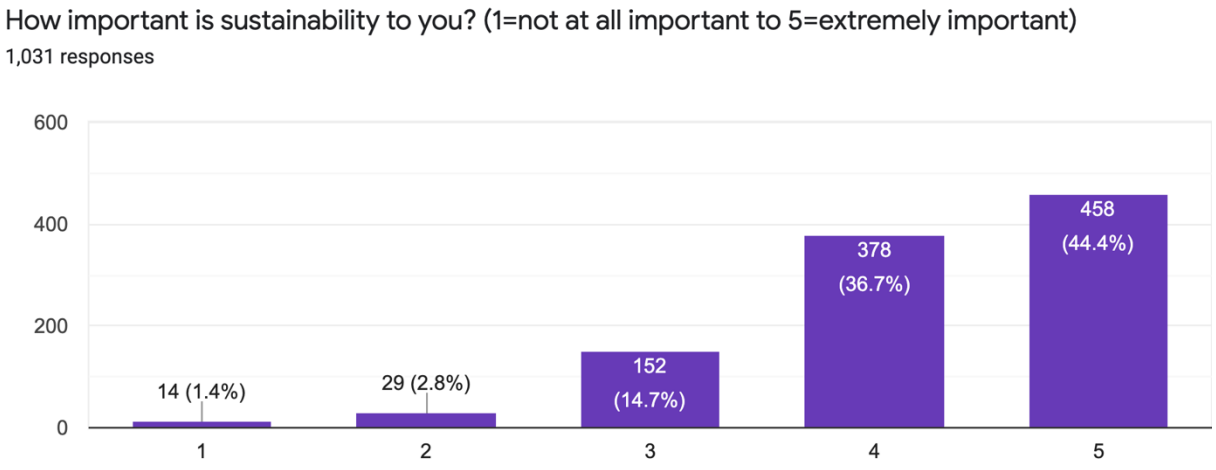
The survey was run on the web-based platform of Google Forms for four days, December 9-12, 2019. Over the course of these four days, the survey received 1,104 responses. Students were not required to answer each question, so some questions had slightly fewer responses. Blank forms were discarded. 1,072 responses remained. The survey was advertised by sharing electronically over group messages, GroupMe chats, personal social media, and in-person through tabling. On Wednesday, December 11, at the 10th and Fee Ln intersections, as well as Thursday, December 11, at the Woodburn Clock Tower intersection, IUSG members passed out small sheets of paper with the QR code linked to the survey.

Due to the nature of the survey's distribution, the survey was targeted toward IU students. 96.4% (1,036) of the respondents reported they were a student. 21 alum, 9 staff, 3 parents and 2 faculty responded to the survey as well. Due to this, **data in this report only covers the 1,036 student responses**. All additional comments and thoughts have been provided to the IUSG Sustainability Committee. Certain ones are featured on this report that speak directly to the question, but all responses have been provided.

Importance of Sustainability:

This question asked how important sustainability was to the respondent and allowed respondents to select from one of five choices on a Likert scale. Out of all the response choices, 5 (extremely important) received the most responses. **458 (44.4%) students reported that sustainability was extremely important to them**. An overwhelming majority (81.1%) of students reported either 4 or 5, representing the high importance of sustainability to most

students. Only 14 (less than 2%) of the student respondents answered that sustainability was not at all important (choice 1) to them.

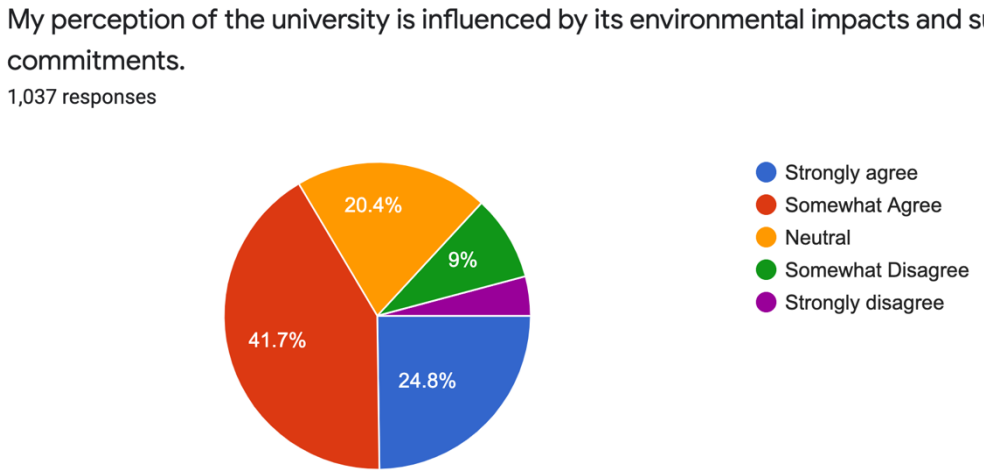


Note: Out of the 35 alum, staff, faculty, and parent responses, all but three reported that sustainability was either 4 (very important) or 5 (extremely important) to them.

University Perception:

When asked if their perception of the university **was** impacted by its environmental impacts and sustainability commitments, **two-thirds (66.5%) of students agreed with the statement**. One in four students (24.8%) reported that they strongly agreed that their perception of the university was impacted by environmental and sustainability impacts.

Only 13.1% of students somewhat disagreed or strongly disagreed with the statement, solidifying that a majority of students want to see their university making sustainable



commitments and upholding environmental stewardship. Some students reported in the Additional Comments section that they felt:

- "disappoint[ed] being at a university that isn't prioritizing [sustainability]."
- "IU should be doing much more. We are behind other Big-10 counterparts in terms of sustainability measures. Our dedication to fossil fuel investment is hurting our reputation and our students."

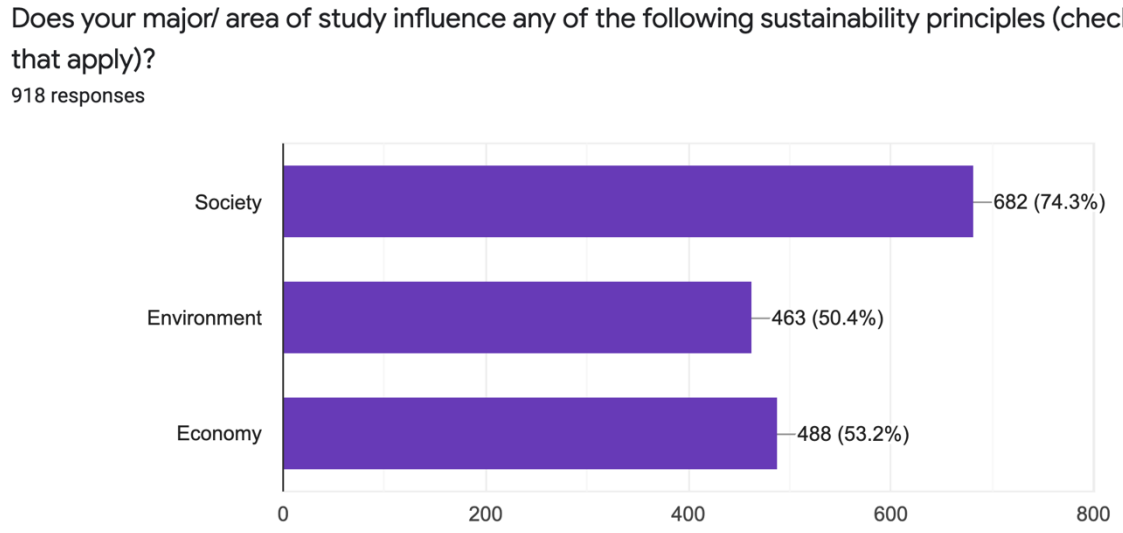
Divesting in Fossil Fuels

When asked whether Indiana University should continue investing in the fossil fuel industry, an overwhelming majority answered "No." **74.7% (over 700) of students believe it is time for IU to divest in fossil fuels.** 7.9% of students said they needed more information, where only 17.4% of students believe IU should continue investing in fossil fuels. Some comments from the additional comment section:

- "I would respect IU much more highly if they committed to divesting from the fossil fuel industry."
- "IU needs to get its sustainable act together. A university cannot invest in the future of its students if it does not divest from the industries threatening that future."

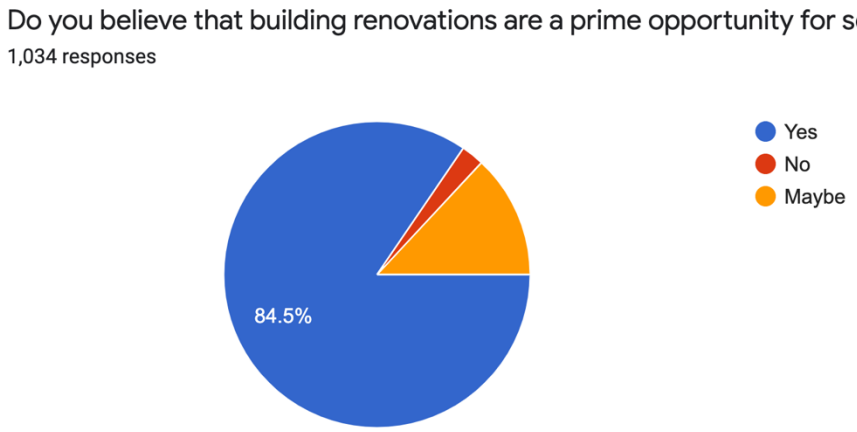
Major/Area of Study:

85.6% (918) of students reported that their major related to at least one of the three areas of sustainability principles: society, environment, or economy. 247 students checked all three principles, and 221 checked two of the three principles. An overwhelming majority of students have a vested interest in environmental preservation and sustainability. **Over 900 students surveyed are studying a field impacted by sustainability**. Students are creating pathways to careers in these areas and others through their studies.



Solar Panel Renovations

Survey respondents were asked whether or not building renovations would be a prime opportunity for solar power integration. **84.5%, or nearly 900 students, of the respondents agreed that yes, building renovations are a good time to implement solar panel technology** on the IUB campus. Another 13.1% of students reported "Maybe." Only 2.4% of students said "No." Overall, most students believe that the continued improvements and renovations to university buildings would be optimal chances to expand solar technology at IU.



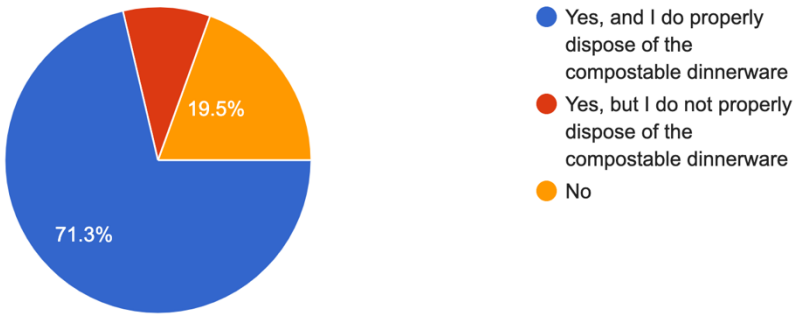
Reusable and Compostable Dinnerware

Currently, IU dining halls provide compostable organic-based plastic utensils. When asked whether or not students did know how to properly sort and dispose of their dinnerware at the dining halls, 71.3% responded "Yes, and I do properly dispose of the compostable dinnerware." However, this leaves nearly three in ten students that do not know or choose not to properly dispose of the compostable dinnerware. **About 20% (19.5%) of students responded that they did not know how to dispose of these utensils. Standing efforts to educate students about the proper disposal have not reached every student**.

An alternative to the continued use of compostable dinnerware is the implementation of reusable (metal likely) dinnerware at the dining halls. When asked whether they would be willing to use reusable dinnerware, **over three in four (75.8%) of students responded they would be willing**. Another 140 students (13.5%) responded "Maybe." A few concerns of the additional comment section related to this question, particularly in the potential for increased water usage needed to clean these dishes or the need to retain an option for the to-go dinnerware with some students taking their food outside. Additionally, many students wanted to ensure the sanitary nature of these utensils and that they would be cleaned properly.

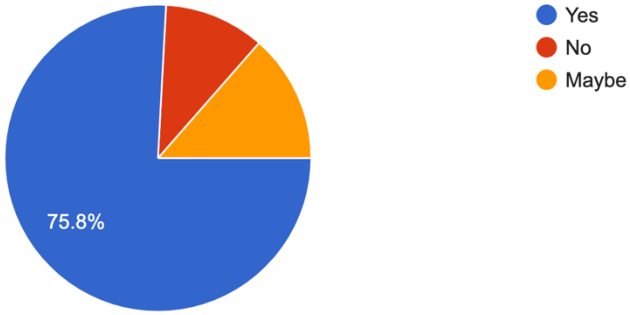
Do you know how to properly dispose of the compostable dinnerware in the dining halls?

1,032 responses



Are you willing to use reusable dinnerware in the dining halls?

1,035 responses



Conclusion/Policy Recommendations:

1. Over four in five (81.1%) of IU students believe sustainability is of high important (rating it 4 or 5 out of 5). Acknowledging that student interests lie in this area, the IUSG Data Collection Team advocates for increasing university-sponsored sustainability commitments and working with student panels to develop a more environmentally conscious campus in all possible capacities. Components of university life, ranging from transportation and bus services, to appliance efficiency and building light fixtures, to dining hall practices and classroom paper policies, all factor into upholding sustainable practices at the university level. Large scale investments are also of interest to students, and institutional change is critical to improving overall climate health and protection.
2. The IUSG Data Collection Team strongly recommends the maximum divestment of the fossil fuel industry by Indiana University with acknowledgement of the survey results. With three-quarters (74.7%) of students supporting the divestment, this would align strongly with student interests. Additionally, the Data Collection Team would advocate for a publicity campaign about the standing Indiana University investments in the fossil fuel industry, seeing that nearly 10% of students needed more information about the topic and could not confidently answer a “Yes” or “No” to this question.
3. Seeing that about 85% of students agreed that solar panels could be implemented during building renovations, the Data Collection Team recommends investigating current renovation plans for the coming five to ten years and discussing adding solar implementation to their construction plans. We also recommend investigating the costs associated with this technology and seeking local, state, or federal grant or rebates to lower the cost of this implementation.
4. Recognizing that 19.5% (nearly one in five) of students do not know how to properly dispose of the compostable dinnerware supplied at IU dining halls, the IUSG Data Collection Team recommends working with the Office of First Year Experiences or other entities to make this a part of freshman orientation curriculum. Additionally, we recommend creating other publicity materials to help students understand how to sort and dispose of trash in the dining halls. Inspired by some comments made by respondents at the end of the survey, we also recommend investigating the upcoming IMU (Indiana Memorial Union) renovation for the potential to implement reusable dinnerware. Reusable dinnerware is already used at the IMU Tudor Room and the Collins Living-Learning Center during the dinner buffet.
5. The IUSG Data Collection Team would be happy to discuss further recommendations and encourages all relevant parties to review the data and survey findings to create feasible and positive policy recommendations in their area of expertise. Any further questions should be directed to iusgsurvey@gmail.com.

Appendix H - STARS Sustainability Learning Outcomes

AC 2: Learning Outcomes

8 points available

Rationale

This credit recognizes institutions that have adopted sustainability learning outcomes. Learning outcomes help students develop specific sustainability knowledge and skills and provide institutions and accrediting bodies with standards against which to assess student learning.

Applicability

This credit applies to all institutions that have degree programs.

Criteria

Part 1. Institutional sustainability learning outcomes

Institution has adopted one or more sustainability *learning outcomes* that apply to the entire student body (e.g., general education requirements covering all students) or, at minimum, to the institution's *predominant student body* (e.g., learning outcomes that cover all undergraduate students).

The learning outcome(s) may be explicitly *focused on sustainability* or *supportive of sustainability* (see Standards and Terms). Mission, vision, and values statements do not qualify.

Part 2. Program-level sustainability learning outcomes

Institution's students graduate from degree programs (i.e., majors, minors, concentrations, certificates, and other academic designations) that require an understanding of the concept of sustainability, i.e., programs that:

- Have been identified as sustainability-focused programs in the Undergraduate Program or Graduate Program credit,
- Have adopted one or more *sustainability-focused learning outcomes* (i.e., student learning outcomes that explicitly focus on the concept of sustainability or the interdependence of ecological systems and social/economic systems), AND/OR
- Require successful completion of a sustainability-focused course as identified in the Academic Courses credit.

This credit includes graduate as well as undergraduate programs. Extension certificates and other certificates that are not part of academic degree programs do not count for this credit; they are covered in the Continuing Education credit in Public Engagement. Programs that include co-curricular aspects may count as long as there is an academic component to the program.

Scoring

Part 1 and Part 2 of this credit are scored together. An institution earns the maximum of 8 points available for this credit when:

- It has adopted one or more sustainability-focused learning outcomes that apply to the entire (or predominant) student body (Part 1) AND at least 25 percent of students graduate from degree programs that require an understanding of sustainability (Part 2);
- It has adopted learning outcomes that are supportive of sustainability and apply to the entire (or predominant) student body (Part 1) AND at least 75 percent of students graduate from degree programs that require an understanding of sustainability (Part 2); OR
- All students graduate from degree programs that require an understanding of sustainability (Part 2).

Each part is scored as follows:

Part 1

Institutions earn the maximum of 6 points available for Part 1 of this credit for having adopted one or more sustainability-focused learning outcomes that apply to the entire (or predominant) student body. Partial points are available. An institution that has adopted learning outcomes that are supportive of sustainability, but not explicitly focused on sustainability, earn 2 points (one-third of the points available in Part 1).

Part 2

Institutions earn the maximum of 8 points available for this credit when all students graduate from degree programs that require an understanding of sustainability. Incremental points are available for Part 2 based on the percentage of students who graduate from such programs. For example, if half of all students graduate from programs that have adopted sustainability-focused learning outcomes, an institution would earn 4 points (half of the points available).

Points for Part 2 of this credit are calculated automatically in the STARS Reporting Tool as follows:

Factor		**Number of graduates from degree programs that require an understanding of sustainability**		**Total number of graduates**		**Points earned**
8	×	_____	÷	_____	=	Up to 8

Reporting Fields

Required

Part 1

- ☐ Has the institution adopted one or more sustainability learning outcomes that apply to the entire student body or, at minimum, to the institution's predominant student body (e.g., all undergraduate students)?

  If yes:

  - Which of the following best describes the sustainability learning outcomes?
    - Sustainability-focused (explicitly address the concept of sustainability or the interdependence of ecological systems and social/economic systems)

        - Sustainability-supportive (include specific intellectual and practical skills that are critical for addressing sustainability challenges)
    - A list of the institution level sustainability learning outcomes

Part 2

- ☐ Total number of graduates from degree programs (i.e., majors, minors, concentrations, certificates, and other academic designations)
- ☐ Number of graduates from degree programs that require an understanding of the concept of sustainability (i.e., have been identified as a sustainability-focused program, have adopted sustainability-focused learning outcomes, or require a sustainability-focused course)
- ☐ A brief description of how the figure above was determined
- ☐ Documentation supporting the figure reported above (e.g., a list of degree programs and their associated sustainability-focused learning outcomes) (text or upload)
- ☐ Do the figures reported above cover one, two, or three academic years?

Optional

- ☐ Website URL where information about the sustainability learning outcomes is available
- ☐ Additional documentation to support the submission (upload)
- ☐ Data source(s) and notes about the submission
- ☐ Contact information for a responsible party (an employee who can respond to questions regarding the data once it is submitted and available to the public)

Measurement

Timeframe

Part 1

Report on sustainability learning outcomes that have been adopted as of the anticipated date of submission.

Part 2

Report the most recent data available within the three years prior to the anticipated date of submission. Institutions may choose to report data from one, two, or three academic years, as long as both the total number of graduates and the number of graduates from programs that have sustainability learning outcomes are measured during the same time period.

Sampling and Data Standards

Not applicable

Standards and Terms

Predominant student body
An institution's predominant student body is defined as the primary academic division (e.g., undergraduate versus graduate) that enrolls the greatest share of the total student population. For example, the predominant student body of an institution with 5,000 undergraduate students, 2,000 graduate students, and 500 post-graduate students would be undergraduate students.

Student learning outcomes

Consistent with the United Nations Educational, Scientific and Cultural Organization (UNESCO), student learning outcomes are defined as:

> Statements of what a learner is expected to know, understand, and be able to demonstrate after completion of a process of learning as well as the specific intellectual and practical skills gained and demonstrated by the successful completion of a unit, course, or programme. Learning outcomes, together with assessment criteria, specify the minimum requirements for the award of credit, while grading is based on attainment above or below the minimum requirements for the award of credit. Learning outcomes are distinct from the aims of learning in that they are concerned with the achievements of the learner rather than with the overall intentions of the teacher.

Thus, sustainability learning outcomes are statements that outline the specific sustainability knowledge and skills that a student is expected to have gained and demonstrated by the successful completion of a unit, course, or program.

Sustainability-focused learning outcomes

Sustainability-focused learning outcomes are student learning outcomes that explicitly address the concept of sustainability. A learning outcome does not necessarily have to include the term "sustainability" to count as sustainability-focused as long as there is an explicit focus on the interdependence of ecological systems and social/economic systems. Specific examples include (but are not limited to):

- Students will be able to define sustainability and identify major sustainability challenges.
- Students will have an understanding of the carrying capacity of ecosystems as related to providing for human needs.
- Students will be able to apply concepts of sustainable development to address sustainability challenges in a global context.
- Students will identify, act on, and evaluate their professional and personal actions with the knowledge and appreciation of interconnections among economic, environmental, and social perspectives.

Sustainability-supportive learning outcomes

Sustainability-supportive learning outcomes are student learning outcomes that include specific intellectual and practical skills (and/or attitudes and values) that are critical for addressing sustainability challenges, but do not explicitly address the concept of sustainability (e.g., systems and holistic thinking, change agent skills, interdisciplinary capacities, social and ethical responsibility). Specific examples include (but are not limited to):

- Students will be able to demonstrate an understanding of the nature of systems.
- Students will have an understanding of their social responsibility as future professionals and citizens.
- Students will be able to accommodate individual differences in their decisions and actions and be able to negotiate across these differences.
- Students will be able to analyze power, structures of inequality, and social systems that govern individual and communal life.
- Students will be able to recognize the global implications of their actions.