

# Funding Application – Step II

# **Funding Criteria**

#### A. General Rules

- 1. Students, faculty, and staff are encouraged to submit requests for funding. Student-led projects require a faculty or staff sponsor in order to have funds awarded.
- 2. Funding can only go to university-affiliated projects from students, faculty, staff, and departments.
- 3. All SSC projects must make a substantial impact on students. This may be a direct impact or an impact through education and engagement. All SSC funding is 100% from student green fees, so the projects funded by the students must benefit them.
- 4. SSC encourages innovation and new technologies creative projects are encouraged to apply.
- 5. Unless a type of expense is specifically listed below as having restrictions, SSC can generally fund it. The items referenced below should not be taken as comprehensive list.

### B. Things SSC Can Fund, On A Case-By-Case Basis

- 1. SSC can fund feasibility studies and design work; however, it must work toward ultimately addressing a sustainability need on campus.
- 2. SSC can fund staff positions that are related to improving campus sustainability. Strong preference will be given to proposals receiving matching funding from departments and/or plans for maintaining continuity of the position after the end of the initial grant.
- 3. SSC can fund outreach events with a central theme of sustainability, provided their primary audience is the general campus community.
- 4. SSC discourages funding requests for food and prizes but will consider proposals on a case by case basis that prove significant reasoning.
- 5. SSC can fund repairs and improvements to existing building systems as long as it works toward the goal of improving campus sustainability; however, a preference is shown to projects utilizing new or innovative ideas.
- 6. SSC can provide departments with loans for projects with a distinct payback on a case by case base. Loans will require a separate memorandum of understanding between SSC and departmental leadership pledging to repay the award in full and detailing the payback plan.

### C. Things SSC Will Not Fund:

- 1. SSC will not fund projects with a primary end goal of generating revenue for non-University entities.
- 2. SSC will not fund personal lodging, food, beverage, and other travel expenses.
- 3. SSC will not fund any travel expenses.
- 4. SSC will not fund tuition or other forms of personal financial assistance for students beyond standard student employee wages.

Your Step 2 funding application should include this application, the supplemental budget form, and any letters of support.

Please submit this completed application and any relevant supporting documentation to <u>Sustainability-Committee@Illinois.edu</u>. The Working Group Chairs will be in contact with you regarding any questions about the application. If you have any questions about the application process, please contact the Student Sustainability Committee at <u>sustainability-committee@illinois.edu</u>.

#### **General & Contact Information**

Project Name: Sustainable World Network

Total Amount Requested from SSC: 28,855

Project Topic Areas: ☐ Land & Water ☒ Education ☐ Energy
☐ Transportation ☐ Food & Waste

Applicant Name: Barbara Hug, Stina Krist, Julia Poel

Campus Affiliation (Unit/Department or RSO/Organization): Department of Curriculum and Instruction,
College of Education

Email Address: bhug@illinois.edu

Check one:
☐ This project is solely my own. This is a collaborative project between Hug and Krist OR
☐ This project is proposed on behalf of (name of student org., campus dept., etc.):

**Project Team Members** 

Name	Department	Email
Barbara Hug	Department of Curriculum and	bhug@illinois.edu
	Instruction	
Stina Krist	Department of Curriculum and	ckrist@illinois.edu
	Instruction	
Julia Poel	Department of Curriculum and	jgpoel2@illinois.edu
	Instruction, UIUC student	
	(junior) in the elementary teacher	
	education program	

#### **Student-Led Projects (Mandatory):**

Name of Faculty or Staff Project Advisor: NA

Advisor's Email Address: NA

# Financial Contact (Must be a full-time University of Illinois staff member)

Contact Name: Toshua York, Director of Budget & Resource Planning, Finance

Unit/Department: College of Education Email Address: tmyork@illinois.edu

# **Project Information**

Please review the proposal materials and online content carefully. It is <u>highly recommended</u> you visit a working group meeting sometime during the proposal submission process.

## Please provide a brief background of the project, its goals, and the desired outcomes:

You may copy and paste your Step 1 application answer if nothing has changed.

Our project, the Sustainable World Network, has as a core goal the creation of a well-resourced network of science educators dedicated to the teaching and learning of core sustainability education. To achieve this goal, we are creating a database of digital sustainability education resources that will be freely available to preservice and in-service teachers. Additionally, in partnership with local Champaign schools, we have started to identify already existing networks and approaches to sustainability education. We are interested in documenting through teacher and student interviews what is currently happening and of interest to the local community. Two pilot projects with a Champaign elementary and high school will be used as a starting point for this project. With these projects, UIUC students (pre-service elementary and secondary science teachers) will be University representatives working with Champaign in-service teachers and K-12 students to both use and add to the database and to grow the Sustainable World Network.

Below we summarize our goals of the project and provide a detailed timeline for the project **Project Goals:** 

- 1) Develop an online digital database of sustainability resources through a James Scholar Research Project
  - a. UIUC pre-service elementary teachers are currently working on developing this database as part of a James Scholar project led by Hug and Krist. Julia Poel is a UIUC junior coordinating additional UIUC elementary education students as part of this project
- 2) Identify current sustainability education activities in local schools through interviews with local inservice teachers. These teacher interviews will be done in connection with interviews of local K-12 students to identify what sustainability issues are important to K-12 students
  - a. Interviews will start during the 2021 fall and continue to the end of the academic year. UIUC teacher education candidates (pre-service teachers) will develop and conduct interviews.
- 3) Identify and develop sustainability networks through interviews and partnerships with local schools. This will be an ongoing process and will involve analysis of the interviews as well as the partnerships developed and implemented in collaboration with Booker T. Washington Elementary School (BTW) and Champaign High Schools.
  - a. We are currently working with BTW administration to develop the elementary strand of this project.
  - b. We are working with the Champaign School District's Coordinator of Secondary Teaching and Learning to collaboratively develop a "Tree Canopy Project" for interested teachers, students and community members at the high school level.
  - c. Information from the interviews and resources from the database will be incorporated into UIUC preservice methods courses as part of a project where UIUC students develop a sustainability unit. These units will be developed in partnership with our school partners for use out in the local classrooms. This activity will be done at both the elementary and secondary level.
- 4) In year 2, expand the James Scholar Research Project to be a more inclusive project for interested students across the University (offered possibly as a general elective or Campus Honors course)

# Detailed timeline of the project: January-March 2022

- Develop partnerships with Booker T. Washington (BTW) and Champaign High Schools
- Through a James Scholar project, develop a teacher and student interview focused on issues of sustainability and what is happening locally around these issues in K-12 schools

- Collect and analyze teacher and student data around sustainability interests, education, and current practices
- Finalize data base of sustainability education resources
- Develop initial activities for use out in K-12 classrooms

## March-May 2022

- Complete teacher and student interviews
- Implement elementary sustainability teaching activities and "Tree Canopy Project" with interested Champaign High Schools

#### May-August 2022

- Analyze teacher and student interviews; collect additional information as needed
- Continue development of projects using a data informed process (revise data base, continue to identify networks)
- Create resources for use in elementary and high school science methods courses
- Expand partnerships with additional schools (Urbana) if possible

### **August-December 2022**

- Finalize and use materials in Fall 2022 methods courses (elementary)
- Work in both Champaign and Urbana communities
- Expand James Scholar project to include additional undergraduates

#### January-May 2023

- Use materials in Fall 2022 methods courses (elementary and high school)
- Work in both Champaign and Urbana communities
- Implement James Scholar project

### May-August 2023

- Finalize material for continued use in methods courses
- Prepare publications and conference presentations

#### **August-December 2023**

- Use materials in Fall 2023 methods courses (elementary)
- Work in both Champaign and Urbana communities
- Implement revised James Scholar project as a general elective or Campus Honors course and
- Develop a plan for continued implementation across the multiple university courses where the Sustainable World project is integrated.
- Final report written and submitted (Reports will be created throughout the project in order to document project of the project: Fall, Spring and Summer)

### Where will the project be located? Are special permissions required for this project site?

If special permission is required for this location, please explain and submit any relevant letters of support with the application.

This project is currently planned to take place in schools within the Champaign School District. We have been working with Jamie Roundtree (BTW Principal) and his support staff at BTW and with Mindy Waters as the Champaign Unit 4 Coordinator of Teaching and Learning. We have submitted the necessary paperwork (collaboration request form) through Dr. Raya Hegeman-Davis, the University of Illinois College of Education School University Research Relations Coordinator. We will work to ensure that we follow both the University and Champaign Unit 4 district policy around Covid 19 and additional safety measures.

Other than the project team, who will have a stake in the project? Please list other individuals, groups, or departments affiliated directly or indirectly by the project. This includes any entity providing funding (immediate, future, ongoing, matching, in-kind, etc.) and any entities that benefit from this project.

Please attach letters of commitment or support at the end of the application.

• University students interested in James Scholar research project credit

- Elementary and high school preservice teachers (university students enrolled in the elementary science methods courses (CI 450 and CI 451) and the secondary science methods (CI 401) class.
- Elementary and high school teachers and students in Champaign-Urbana area.

### How will this project involve and/or benefit students?

This includes both direct and indirect impact.

This project will benefit UIUC students at different levels.

- 1) Development and access to the data base of resources
  - a. Currently UIUC elementary education students participating in a James Scholar project are being impacted as they are identifying resources for inclusion in the database. They will be instrumental in conducting the interviews of teachers and students. This James Scholar project will extend into the spring semester. Additional students will be recruited at this time (expanding beyond the original elementary focus to include high-school-focused pre-service teachers and UIUC students interested in these ideas more generally)
  - b. In the future, UIUC students will use the database to develop materials as part of the partnerships between the university and local schools.
- 2) Partnership activities
  - a. UIUC elementary education students in the elementary science methods course (~100 students/year) will be impacted as they will participate in partnership activities with the BTW school and other schools as the project expands.
  - b. UIUC secondary science students 15-20 students/year) will be impacted as they will be part of the Tree Canopy Project with the Champaign High Schools.
  - c. Elementary and high school teachers and their students will be impacted by the interactions with the University of Illinois students. Teachers will have an opportunity to work collaboratively with the project (University students and faculty) developing curriculum materials. Elementary and high school students will be impacted through the implementation of the activities developed by teachers and the University students.
  - d. We anticipate that UIUC students in these teacher education programs will continue to be impacted by this project through the continued school partnerships and resulting activities after the end of the funded project.

# How will you bring awareness and publicize the project on campus? In addition to SSC, where will information about this project be reported?

We will work to publicize this project through our elementary and secondary teacher education programs. Additionally, we will publicize this through the Champaign Unit 4 Schools we are working with.

We are currently working to develop a Sustainable World project website which will be used to publicize the project.

#### **Financial Information**

In addition to the below questions, please submit the supplemental budget spreadsheet available on the Student Sustainability Committee <u>website</u>. Submission of both documents by the submission deadline is required for consideration of your project.

Have you applied for funding from SSC before? If so, for what project? No

If this project is implemented, will you require any ongoing funding required? What is the strategy for supporting the project in order to cover replacement, operation, or renewal costs?

Please note that SSC provides funding on a case by case basis annually and should not be considered as an ongoing source of funding.

We are asking for funding in order to develop and implement the project during the first 2 years. However, after this development phase, we anticipate that the project will be integrated into the science methods courses in both the elementary and secondary programs. Additionally, we are hopeful that an extended partnership between the local schools and university will allow us to offer an undergraduate course with a focus around sustainability outreach to continue.

Below and in the attached document, we include our proposed budget and justification:

- Undergrad hourly for summer work (1 student @ 10 hrs/week for 8 weeks each summer; hourly rate \$14/hr); 4 students @ 5 hrs/week for 8 weeks each summer; hourly rate \$14/hr) A total of 5 undergraduates will be hired during the summer to work on the project. 1 student will be hired to work 10 hours per week for 8 weeks (lead undergraduate), the remaining students (2 UIUC elementary and 2 secondary pre-service teachers) will be hired to work 5 hours per week for 8 weeks. The lead undergraduate student will work with the project graduate students to help coordinate the work that the other UIUC preservice teachers do.
- Grad hourly (5 hrs/week each AY) \$9,262. This graduate student will oversee the database updating, data administration, and coordinate with partner sites. This student will collaboratively work with the lead undergraduate during the summer to direct the necessary work.
- Teacher participant stipends (interviews and collaborative work stipends split evenly between elementary and secondary teachers): \$50/interview (20 interviews per year: \$2000 across 2 years); collaborative work stipends for 5 elementary and 5 secondary teachers each year @ \$25/hr for 20 hrs each year —\$10,000 for 2 years. Interviews will be done with BTW teachers, Champaign High School teachers and community members to identify sustainability issues and interests in the local community. We anticipate working closely with 5 elementary and 5 secondary teachers each year as part of the collaborative development work that will happen as part of the various university courses. The collaborative work stipends will be for these project teachers that we work closely with in codeveloping activities and piloting materials in their classrooms.

Please include any other obtained sources of funding. Have you applied for funding elsewhere? Please attach any relevant letters of support as needed in a separate document.

The data base portion of this project initially developed out of a project funded through the Illinois Global Institutes. However, funding is restricted to portion of the project that focuses on aspects of sustainability that are global in nature. We are not able to use any of this funding to fund undergraduate education or more local activities.

#### **Environmental, Economic, and Awareness Impacts**

How will the project improve environmental sustainability at the Urbana-Champaign campus? If applicable, how does this project fit within any of the <u>Illinois Climate Action Plan</u> (iCAP) goals?

Our project relates to 2 core areas in the iCAP report.

- 7.4 Local Collaborations
  - o By partnering with local schools across projects that we co-develop, we will increase collaboration at the local level for our UIUC students.
- 7.5 Support programs to develop love of nature and sustainability among children
  - We anticipate that we will have direct impact on children in the local community by the partnerships that develop. Additionally, we believe we will impact the teaching practices of our preservice teachers while students in our teacher education programs on campus and as such, will impact their teaching when they become teachers with classrooms of their own. This will continue to impact their students throughout their teaching career.

# How will you monitor and evaluate the project's progress and environmental outcomes? What short-term and long-term environmental impacts do you expect?

Some examples include carbon emissions, water conservation, green behavior, and reduced landfill waste.

We are interested in documenting impact of our project on both the UIUC pre-service students as well as the K-12 teachers and students. In order to do this, we will examine project artifacts (curriculum materials, classroom artifacts, student and teacher surveys, interviews) for evidence of project impact around teachers' environmental awareness and sensitivity (Emel, Ozdilek, & Yalcin-Ozdilek, 2015) as well their teaching self-efficacy for sustainable issues/content (Martínez-Borreguero, Maestre-Jiménez, Mateos-Núñez, & Naranjo-Correa, 2020). We anticipate using a pre/post structure for university courses and any professional development to document how our project impacts both university students and local teachers. Additionally, we will interview a subset of our pre-service and in-service teachers to qualitatively document how teachers' understandings and self-awareness of sustainability is impacted over time (Birdsall, 2014). We will also work to document the impact this project has on K-12 student participants.

# What are your specific outreach goals? How will this project inspire change at UIUC? If applicable, how does this project impact environmental injustice or social injustice?

Increase environmental stewardship at UIUC and impact on social justice issues

- Past James Scholar participants have reported the impact that working on the project to compile their database has impacted their own environmental choices and dispositions towards sustainability. We anticipate continuing to see this impact.
- In developing units and materials for use by local teachers, we will encourage the integration of activities that move beyond "learning about" sustainability to taking action and having students make change in their lives and their communities. In doing so, we will have the opportunity to directly impact issues of social justice during the duration of the project and into the future.
- A central focus of our teacher education programs in the College of Education is on social justice issues and teaching from a social justice stance. Because of this focus, we will take an environmental justice lens to the sustainability issues present in our project.
- As part of the evaluation of the project, we will learn what parts of our project have an impact on the University pre-service teachers and local in-service teachers and their students. We will be able to take what we learn and revise our University courses so that we have a greater impact on the UIUC preservice teachers/students in our courses moving forward. This in turn will have an impact on the K-12 students when the UIUC pre-service teachers become teachers with their own classrooms.

#### **References:**

Birdsall, S. (2014). Measuring student teachers' understandings and self-awareness of sustainability. *Environmental Education Research*, 20(6), 814-835.

Emel, O. B., Ozdilek, H. G., & Yalcin-Ozdilek, S. (2015). The short term effectiveness of an outdoor environmental education on environmental awareness and sensitivity of in-service teachers. *International Electronic Journal of Environmental Education*, *5*(1), 1-19.)

Martínez-Borreguero, G., Maestre-Jiménez, J., Mateos-Núñez, M., & Naranjo-Correa, F. L. (2020). Analysis of environmental awareness, emotions, and level of self-efficacy of teachers in training within the framework of waste for the achievement of sustainable development. *Sustainability*, 12(6), 2563.