



STUDENT SUSTAINABILITY COMMITTEE

Semesterly Report

Thank you for your commitment to green initiatives at the University of Illinois. One of the ongoing requirements listed in the terms of the funding agreement for your project is the submission of semesterly reports with key information about your project. In addition to this form, please provide additional financial documentation and/or progress photos if available.

Please be as accurate as possible in describing the project (including possible setbacks or challenges in meeting the initial goals of the project). Not fully meeting your project's goals will not disqualify you from making future funding requests as long as your reports are as complete and accurate as possible. If you have any questions, please contact the Student Sustainability Committee, at sustainability-committee@illinois.edu.

Project Name: Sustainable World Collaborative

Date of Report Submission: 5/2023

Project Purpose:

Our project, the Sustainable World Collaborative, has as a core goal to create a well-resourced network of science educators dedicated to the teaching and learning of core sustainability education. To achieve this goal, we have created a database of digital sustainability education resources that will be freely available to pre-service and in-service teachers. We also are developing unit plans addressing key issues in sustainability using resources within the database. Additionally, 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 local and global communities. Across the project, UIUC students (pre-service elementary and secondary science teachers) will be University representatives working with Champaign-Urbana in-service teachers and K-12 students to use and add to the database, thereby allowing the Sustainable World Network to grow. Additional activities are being planned with Cook County teachers and students.

Detailed Accounting of Expenditures to Date:

Two University of Illinois preservice elementary teachers have been appointed to the project and are currently working on developing resources for the database. As of May 2023, a total of \$12, 798 has been spent.

Project Progress to Date:

We are currently working to add more resources to our live website and database that was initially launched in July 2022. As of now, we have just over 300 multilingual resources from

around the world that address topics of sustainability with students in math, science, social studies, social emotional learning, fine and applied arts, geography, and language arts. We are continually adding resources and checking those currently posted to maintain an accurate and relevant database. We have also expanded our grade band from K-6 to K-12. Since the launch of the database, the team has completed two unit plans using the resources in the database that engage students in investigations relating to community and global water and air quality. Once students have collected their data, they are asked to make global and community connections through action projects. All unit plans lead to students making tangible changes using data. Additionally, the database and unit plans have been used in classrooms abroad and within the local Champaign-Urbana community. The team has collaborated closely with teachers in 20 different countries, many of which implemented our unit plans, to continually adapt our work to best serve teachers here and abroad. Our materials are being used for teacher professional development in India, Indonesia, and the United States. Two of the preservice teachers have also collaborated with professors studying sustainable education at Boston University and Arizona State University to further grow the unit plans. In addition, two of the pre-service teachers have written an article for STEM Teaching Tools which is scheduled to be published at the end of May 2023.

We are working toward developing a professional development for teachers within the Urbana school district during the Summer of 2023 and creating more unit plans. One unit plan we are starting now is based on food waste and we are hoping to start another on biodiversity loss before the end of summer 2023. We will also be adding more resources to our database along with blog posts to increase teacher collaboration on how they are implementing the resources in their classrooms.

Student Involvement and Outreach to Date:

Since spring 2022, 6 to 7 University of Illinois preservice teachers have been contributing to the project each semester. One student will continue to work as an academic hourly on this project during Summer 2023.

During the spring and summer semesters of 2022, these students prepared for and presented their early work efforts at the National Association of Science Teaching conference in Chicago. Additionally, during summer 2022, one of the preservice teachers taught the teams first unit plan with teachers at Institutul Cultural in Panamá City, Panamá.

During the fall 2022 semester, two preservice teachers presented at the Student Sustainability Committee's research symposium. Also, one student taught the project's unit plans with their co-teachers at a local Champaign school.

During the spring 2023 semester, the students presented at the College of Education's James Scholar Brunch. Additionally, two undergraduate team members wrote an article for [STEM Teaching Tools](#) with the support of the two project faculty members. This is scheduled to be published by the end of May 2023. Also, the two undergraduate students led two different weeks of professional development for teachers in 20 other countries. This effort was multiple

professional development sessions with different teachers across each week. Teachers returned for a follow up session during the second week of activities. The database and unit plans have been used in two of the pre-service teachers student teaching placements in the local Champaign-Urbana community and one of these students is planning to use the database as part of a fellowship position at Columbia University, New York in a local school in Harlem during the fall of 2023.

Marketing and Promotion Efforts to Date:

During the spring and summer 2022 semesters, the UIUC students presented at the NSTA conference in July 2022 as part of this project and one student taught the team's first unit plan with teachers at a school in Panamá City, Panamá.

During the fall 2022 semester, the students presented at an undergraduate research fair for sustainability and taught the teams new unit plans with teachers in the Champaign schools.

During the spring of 2023 the students wrote an article for [STEM Teaching Tools](#) which is scheduled to be published by the end of May 2023. Additionally, collaboration was done with professors at Boston University and Arizona State University to expand on two frameworks we have based much of our unit plans on - The Manz Investigation Framework and the Sustainability Education Framework for Teachers. The students also presented at the College of Education's James Scholar Brunch, and at many professional development sessions with teachers locally and across the globe.

Additional Comments:

To access the website and database: [Sustainable World Database](#)

Team photo at the National Science Teaching Association Conference:

