



United Nations Sustainable Development Goals Open Pedagogy Fellowship

Cities and Communities - Designing a sustainable homeless shelter.

Courtney Webb, MA, Pima Community College (Arizona)

Jeanie Moon, Montgomery College (Maryland)

2021-2022

Introduction:

You are a part of a collegewide effort to increase access to education and empower students through "open pedagogy." Open pedagogy is a "free access" educational practice that places you - the student - at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of natural resource management, career search, educational support, and recycled materials to achieve SDG #11: Sustainable Cities and Communities. By designing a sustainable homeless shelter in Tucson, AZ SDG#3: Good Health and Well-Being will be a secondary focus.

Learning Objectives:

The students will learn, in general, more about the current homeless situation in Tucson, Arizona and how this problem is expanding. We will do research to determine what resources are available to create a homeless shelter. Those would be from city, county, state, federal and private resources.

Purpose/Rationale:

Students will learn about this expanding social problem and find out what resources are available to create viable solutions for the homeless population.

Instructions:

The students will do preliminary research on the current problem. We will create a design for a shelter. Students will pick one aspect of the design they wish to explore further. These aspects will include: design of the complex, sources of electricity, water, transportation, computers and Internet connections, roads, medical services, USPO services, grocery services and self-governance. The students each pick one aspect of the project. These students will be transferring to U of A the next semester. We will do a field trip to the ENR2 building (Environment and Natural

Resources) to have a tour to discuss the classes and programs the U A offers in these areas. Each student will pick one professor to interview to get more information about how to accomplish this project. The students will take a second field trip to the UA and this time go to the library. They will have a tour by a librarian who will discuss Open Education Resources and how those work. They will also get preliminary pointers on doing a short research presentation on their project.

Format Requirements:

Students will be asked to do the equivalent of a 2-3 page paper on their project. The paper will include one interview with a UA professor about the project and two research resources from the library. Students will choose how they wish to present their findings.

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United Nations Sustainable Development Goals Open Pedagogy Fellowship

Let's Share!: Help the Community Redistribute Computers

Jeanie Moon, Montgomery College (Maryland)
Courtney Webb, Pima Community College (Arizona)
2021-2022

Introduction:

You are a part of a collegewide effort to increase access to education and empower students through "open pedagogy." Open pedagogy is a "free access" educational practice that places you - the student - at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Sociolinguistics and Sociology to achieve SDG #10: Reduced Inequalities as a primary focus and SDG #4: Quality Education as a secondary focus.

Many students from low-income families may face technical/technological challenges when they take online courses. In March last year (2020), some colleges, including Montgomery College, resumed courses 100% online after the lockdown. Some students had to find computers hurriedly to complete the semester, and some of them had to use their old phones. The College and County made efforts to provide assistance to share computers with adult students, but the learners who have sought support said there were not enough devices available, or the process of getting a computer was too complicated and difficult to follow.

While most K-12 students were able to loan devices from the district, college and adult students had less support. Students who don't have high-functioning devices or internet services, unlike those who have high-functioning technology at home, may face additional difficulties doing assignments or assessments. This may cause dropping out of the course, anxieties, or unnecessarily low grades. "Higher education shall be equally accessible to all," the UN Universal Declaration of Human Rights, Article 26 says.

Learning Objectives:

Component 1: What are the UN SDGs? What are our SDGs to achieve? (Week 1)

Objectives: Students will be able to

- 1) Interpret the 17 UN Sustainable Development Goals by visiting the UN website and prioritize them according to the needs of our community
- 2) Demonstrate their knowledge to locate the technological specifications in their computers with the assistance from an expert.
- 3) Use technology to analyze the data about E-waste, and how fast it is growing and where the E-waste is sent in the world.

Component 2: Create a video or presentation that encourages people and companies to share their computers (WEEK 2 & 3)

Objectives: students will be able to

- 1) Collaboratively brainstorm and outline a series of contents where they talk about
 - a. Easy ways to read technological specifications of a computer and how to ask questions about them in an online course
 - b. How important and smart it is to donate, recycle, and redistribute computers
 - c. The main message of the SDGs they want to achieve, and personal stories related to the goals
 - d. How their talents presented in different (art) forms will help them communicate with the general audience, the college and computer / wifi carrier companies
 - e. How their diverse linguistic and cultural backgrounds will enrich the work and what they will do to use their authentic knowledge (i.e. photos of E-waste sent by the U.S in a different country, translated versions of the videos into different languages, charts or graphs that compare the amounts of E-waste in different countries)
- 2) Produce a video/ presentation where there are multiple parts: introductory speech, creative work such as an acted-out scene, illustrations, or photographs that say what people can do to help (re)distribute devices and resources in the community and how they can handle technical / technological difficulties in class.

Component 3: (This will happen in the Spring 2022 semester or when in-person activities are safe) Organize and host a community event where citizens, college students and local branches of computer and Wifi carrier companies

Objectives: Students will be able to

- 1) List contact information they must reach out to coordinate a community event either in a city or the campus
 - a. Where the event will occur
 - b. Who will be invited to the event
 - c. What kind of support they will need and who can help them
- 2) Create a graphic organizer that display all the tasks they will do before, during and after the community event
- 3) Send emails or make phone calls to book the venues and invite people from computer/ wifi companies, local colleges and the community
- 4) Create a flyer about the event and release it on/ offline

Purpose/Rationale:

This is a project-based assignment that aims to provide opportunities mainly for adult English language learners to promote accessibility to resources regarding getting computers and information about the UN SDGs, by representing themselves in the community, and by contributing to the community. They will play an active role to help distribute computers and raise awareness of redistributing or donating high-quality devices rather than throwing them away.

This assignment is to decrease inequalities among adult learners who are taking online courses. According to Computer Hope (2020), consumers are recommended to replace their computers every four years. This assignment aims to tackle two problems caused by this trend of buying new computers- 1) help learners decrease the financial burden of buying new computers every four years, and 2) help computer buyers and computer companies to redistribute computers that are perfectly functioning.

(If the circumstances allow in Spring 2022) Students will facilitate a community event where companies promote their new products and take old computers for recycling. This will be a place where people can bring their perfectly good devices for sharing and learn more about how serious E-waste is contaminating the earth. Students will give a presentation or performance (depending on their talents and choice) to make the event more engaging, entertaining and informative.

Learners are expected to gain and promote their authentic knowledge (about the place they live and the local policies) and skills (writing emails or making phone calls, creating contents such as videos, charts or presentation slides). They will be able to assess their own learning needs and reach out to seek support using community resources.

Colleges will continue to expand online course options for students, but we are not sure how they will help fulfill the needs of learners who cannot afford to buy computers. In addition, not every instructor clearly indicates the technological specifications or platforms they are going to use for class activities in their syllabi. Not every instructor has gained the knowledge on how to communicate with students about technological requirements, and some students can't thoroughly follow what they say about technological specifications. Lack of knowledge on their own devices or how to talk/ ask about them will negatively influence the quality of education.

Instead of asking for donations, students will use their talents and knowledge to encourage the entire community and local branches of computer and internet carrier companies to share computers and resources for everyone. A class where students collaboratively gain authentic knowledge to solve real-life challenges using their talents and skills will provide high-quality education where students have ownership in learning and actively seek support for it using resources in the community.

Instructions:

Component 1: What are the UN SDGs? What are our SDGs to achieve? (Week 1)

Students form groups upon their interests (assignments per group are shown below). Members of each group collaborate to become “experts” of the topic they chose. Students learn about the UN SDGs and this assignment at their own pace.

Group 1: Visit the UN website and learn about the 15 sustainable goals. Discuss why the UN established these goals and what students can learn by knowing about the goals. Discuss SDG #10, 4, 11 and 12. Create slide pages on Google or PowerPoint and present their work.

Group 2: Contact and invite a guest speaker who can teach students how to check the technological specifications and what kind of features an online course will likely require. The goal of this group is to help classmates practice finding the right place in their computers to find information about their devices. They will also facilitate a session where students write a sample email to their instructors to ask what technological specifications or platforms they need for each class.

Group 3: List local branches of computer and WiFi carrier companies. Find how many of these companies are redistributing perfectly working devices in the community by contacting the managers via email. Practice how to write an email with a clear request in a professional manner.

Group 4: Research about E-waste: How many devices, accessories and wires are land-filled in the US and in the world, and in what areas is E-waste is land-filled, and what scientists predict about long-term damages by E-waste.

Component 2: Create a video or presentation that encourages people and companies to share their computers (WEEK 2 & 3)

Learners will create a presentation or video collaboratively for the general public to discuss why and how to share computers, how to decrease E-waste, or how to read technological specifications of their computers. This part will be heavily learner-centered, and students can decide if they want to work collaboratively or individually to produce different portions of the video/ presentation, what format of the final product will be, and they will be encouraged to use their talents (visual arts, translation into their native languages, rhetorical skills, or acting out) for each of the portions.

Example assignments:

Group 1: Create an infographic about the 17 UN SDGs and why it is important for college students to learn about these.

Group 2: Produce a video that explains how to read technological specifications in a computer and how to ask questions about them for their classes.

Group 3: Create a video about how and where they can share or recycle their computers or phones in the community.

Group 4: Create presentation slides with photos of E-waste from the U.S. in a different country, personal stories about taking an online course before fully knowing about their devices, or a visual that displays data on redistribution of computers in the U.S or in the world.

Component 3: (This will happen in the Spring 2022 semester or when in-person activities are safe) Organize and host a community event where citizens, college students and local branches of computer and Wifi carrier companies

I plan to post students' work on a website (that is open to general viewers, such as the program website at the college or Google) and continue this project in Spring 2022. New students will watch / read all the posts and either continue to create contents on the SDGs. Or, if circumstances allow, they will coordinate a community event.

Example assignments (if an in-person community event can safely be facilitated)

Group 1: List contact information they must reach out to coordinate a community event either in a city or the campus

- Where the event will occur
- Who will be invited to the event
- What kind of support they will need and who can help them

Group 2: Create a graphic organizer that display all the tasks they will do before, during and after the community event

Group 3: Send emails or make phone calls to book the venues and invite people from computer/wifi companies, local colleges and the community

Group 4: Create a flyer about the event and release it on/ offline

Format Requirements:

E-mails: the school domain, 1-2 paragraphs

Poster or infographic: free online platforms (such as piktochart or Google Docs)

Video: MP4, Youtube, Vimeo or ScreenCastify, less than 10 minutes

Personal stories: Google Docs or MS Word, one page / writer

Presentation: Google Slides or MS Powerpoint

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United Nations Sustainable Development Goals Open Pedagogy Fellowship

CITIES AND COMMUNITIES: Improving Life for the Homeless. Utilizing used electronic equipment for students and low-income persons.

Courtney Webb, MA, Pima Community College (Arizona)
Jeanie Moon, Montgomery College (Maryland)
2021-2022

Introduction:

You are a part of a collegewide effort to increase access to education and empower students through "open pedagogy." Open pedagogy is a "free access" educational practice that places you - the student - at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Sociology, Environmental Engineering, ESL and Career Studies to achieve SDG #11: Sustainable Cities and Communities.

Homelessness as a social dilemma is on the rise across the country and here in Tucson, AZ. The project seeks to engage students in study to understand what the problem is and how it originates. Thereafter, students will be asked to either design or piggyback on an existing system that can be utilized to improve, in some way, the lives of homeless persons. This can be designing a new building, a housing complex, redesigning existing structures; utilizing natural resources and/or modern technologies. Students will interact with staff at University of Arizona to learn about different programs now in place that study and address sustainable life. Students will research ways to rehab outdated electronic equipment for use by students and low-income students. The secondary focus will be on SDG #8: Decent Work and Economic Growth and SDG #12: Responsible Consumption and Production.

Learning Objectives:

Students will learn the basic seeds of the homeless problem. They will seek to learn what resources are available to assist these problems: citywide, countywide, statewide; with Federal and private resources. They will engage with staff and faculty at the University of Arizona (where they will soon be students) to explore programs and activities that are currently in place to create sustainable environments in our community. They will design their own project, keeping in mind available resources, and creatively explore ways to improve the living situations of the homeless population. Students will research ways to recycle electronic equipment for reuse.

Purpose/Rationale:

Many people in our society are aware and troubled by the continual rise in the homeless situation. Most of us are confused about how to assist these people. What is the right answer? The homeless situation in our society actually affects all of us in ways that we are not aware of. The resources of police, paramedics, doctors, hospitals, street workers, etc., the list goes on, are pulled into the ongoing daily dilemma of these folks. As a society, we need to come up with some fair and equitable solution/s to these continued and rising problems.

Additionally, the stockpile of old electronic equipment in junkyards grow; the homeless and low income persons need to have access to very low cost electronic equipment like cell phones and computers in order to keep up with the daily activities of modern life and school.

Instructions:

Framing the project: Students will first do research to discover likely causes of the rising homeless situation. We will go on a field trip to the ENR2 building onsite at the U of A campus. We will tour the Environmental and Natural Resources Building 2 and find out about UA programs that deal with sustainable environments. Students will contact a faculty member of UA who aligns with their personal project and seek to get information about how their particular project may be accomplished. Students will do research to find out what is currently being done in our local area to help the homeless. Students in MD will research what activities are currently in place to rehab and sell electronic gear.

Further Instructions: Students will do a write up about their initial findings on the homeless. They will then do a discussion on their meeting with the ENR2 faculty meeting and thereafter; combine the two to define their own project. For example: students can develop ways the public library system can utilize refurbished computers to loan out for low-income patrons on a long-term basis. This will reduce inequalities by providing technology 'gear' to individuals who otherwise could not afford to buy them. Students can investigate ways that computer-recharging ports can be made accessible to the public without charge. Instructions: Students will do a field trip to the UA Library. The librarians will discuss aspects of research writing. In addition, the librarians will discuss Open Educational Resources that exist at the UA Library and direct students on how to find and use these resources.

Format Requirements:

Format Requirements: Lastly, students will combine their research and design activities into a presentation. The final product can be a paper, a PowerPoint, or a video. The student may also create a 3D representation of their design and explain how it will work.

CITIES AND COMMUNITIES #1: Improving Life for the Homeless. Utilizing used electronic equipment for students and low-income persons is licensed by Courtney Webb, MA, Pima Community College (Arizona) and Jeanie Moon, Montgomery College (Maryland) under the Creative Commons Attribution 4.0 International (CC BY-NC-SA)



United Nations Sustainable Development Goals Open Pedagogy Fellowship

CITIES AND COMMUNITIES #1: Improving Life for the Homeless. Reclaiming used electronic equipment.

Courtney Webb, MA, Pima Community College (Arizona)
Jeanie Moon, Montgomery College (Maryland)
2021-2022

Introduction:

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Homelessness as a social dilemma is on the rise across the country and here in Tucson, AZ. The project seeks to engage students in study to understand what the problem is and how it originates. Thereafter, students will be asked to either design or piggyback on an existing systems that can be utilized to improve, in some way, the lives of homeless persons. This can be designing a new building, a housing complex, redesigning existing structures; utilizing natural resources and/or modern technologies. Students will study how to reclaim used electronic equipment for its use for students, the homeless and low-income persons. The secondary focus will be on SDG #8: Decent Work and Economic Growth and SDG #12: Responsible Consumption and Production.

Learning Objectives:

Assignment Learning Objectives: Students will learn the basic seeds of the homeless problem. They will seek to learn what resources are available to assist these problems: citywide, countywide, statewide; with Federal and private resources. They will research the resources that are currently available and that are being used now. They will explore (as much as they are able) what the specific needs of the homeless are from the street perspective. They will design their

own project, keeping in mind available resources, and creatively explore ways to improve the living situations of the homeless population.

Purpose/Rationale:

Many people in our society are aware and troubled by the continual rise in the homeless situation. The homeless situation in our society actually affects all of us in ways that we are not aware of. The resources of police, paramedics, doctors, hospitals, street workers, etc., the list goes on, are pulled into the ongoing daily dilemma of these folks. As a society, we need to come up with some fair and equitable solution/s to these continued and rising problems. Additionally, the number of used phones and computers continue to rise in junkyards. How can these devices be rehabbed for the use of students and low income persons?

Instructions

Creating and recording the assignment: Students will first do research to discover likely causes of the rising homeless situation. We will go on a field trip to the ENR2 building onsite at the U of A campus. We will tour of the Environmental and Natural Resources Building 2 and find out about UA programs that deal with sustainable environments.

Students will do research to determine if any studies have been made to determine what the homeless themselves feel they need the most.

Further Instructions: Students will do a write up about their initial findings on the homeless. Students can choose from a number of different projects, such as: students can develop ways the public library system can utilize refurbished computers and telephones to loan out for low-income patrons. Students can investigate ways that computer-recharging ports can be made accessible to the public without charge.

Students can choose to design a Tiny House that can be used to house the homeless to give security and privacy. Also, pre-engineering students can study inexpensive ways to deliver electricity to such a house.

Students can study water and conservation of water resources that can be used for the homeless. A large issue for the homeless, in Tucson, is a lack of facilities for hygiene. Students can explore shower and hygiene options.

Once a homeless person has a phone, how do they get Internet service? Students can explore Internet Zones for public use.

Students can explore the funding that is currently available to help the homeless. They can research where the funds come from: city, county, state, Federal and private. They can create a

grant-writing project to target specific funds. They can explore which homeless groups are the most in need and determine what those specific needs are to be.

Students can explore Medical Clinic options for the homeless. Who is available to provide medical care to the homeless? Nursing students and medical interns from UA? How to find licensed psychiatrists to prescribe and delivery psychiatric medications.

Food: Students can study ways to deliver food to the homeless so they don't go hungry. They can look into the funding and delivery of food.

Rehabbed Electronic Gear: Students in MD can research they ways in which the gear can be rehabbed. Then, once that is done, how can the gear be distributed?

Format Requirements:

Format Requirements: Lastly, students will combine their research and design activities into a presentation. The final product can be a paper, a PowerPoint document or a video. The student may also create a 3D representation of their design and explain how it will work. They can share their projects with other students using Google Sites. The final presentation can be on YouTube, FlipGrid or Prezi platforms.

CITIES AND COMMUNITIES #1 – Assignment Title: Improving Life for the Homeless.
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United Nations Sustainable Development Goals Open Pedagogy Fellowship

Support Our Community: A Project-based Assignment to help improve the lives of the homeless.

Courtney Webb, MA MA, Pima Community College (Arizona);
Jeanie Moon, Montgomery College (Maryland)
2021-2022

Introduction:

You are a part of a collegewide effort to increase access to education and empower students through "open pedagogy." Open pedagogy is a "free access" educational practice that places you - the student - at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Applied Linguistics, Sociology, and Careers to achieve SDG #11: Sustainable Cities and Communities. In assignments 1 and 2, students will research the field for information about the homeless situation in general and in our community in particular. They will develop their own design to assist the homeless.

Learning Objectives:

- A. Identify and converse about the challenges of taking an online course.
- B. Identify who the homeless are, what they represent in our society and who helps them.
- C. Who provides electricity, Internet services, phone, computers, charging stations, showers/toilet free medical and dental care for the homeless now?
- D. What Agencies/organizations are already providing services? Locate their specific addresses.
- E. Design a resume that stresses student interests, background and abilities that would be required to work for one such organization.
- F. Write a cover letter to the hiring authority of an organization Seek to get an interview to talk about internships and jobs.
- G. E. Make contact with the organization for an interview and seek to get the job.

Purpose/Rationale:

- A. This is a project-based assignment that aims to provide students with information about the nature and extent of the growing homeless situation in our communities. This part of the assignment is to familiarize students with agencies already involved in the business of helping the homeless and low-income persons. 210UA students will be transferring to the University of Arizona. This project is aimed at getting them interested in Green jobs for the future and to also help mold their decisions about choosing a major at U of A.
- B. The assignment will teach students affordable ways to decrease inequalities of the homeless by giving them better access to toilets/showers. laundry facilities, Internet services, free phones/computers, sustainable food gardens and the like.
- C. Learners are expected to gain and promote their authentic knowledge about the place they live and local policies. Also, it will improve their writing and interviewing skills, They will be able to assess their own learning needs and reach out to seek support using community resources.

Instructions:

Students visit the UN website and learn about the Sustainable goals. Students will research the history of homelessness in our community; what are root causes? Who are the homeless? In addition, what are the greatest needs of the homeless and who does or does not help them? Students will interview a staff member at the UofA to help research their project. They will locate the name/address of a local Green employer. They will create a resume and cover letter and send it out. They will follow up on the letters to seek to get a job as either an intern or a paid employee. Students will follow up with employers. They will complete their design project and then create a YouTube video, a PowerPoint presentation, a Google site or Prezi presentation for the Dec.17, 2021 display date. They will display their project design with other students on the Dec. 17, 2021 presentation date.

Format Requirements:

Students will first submit a short paper to talk about their research and ideas for the design. The second paper will be more specific about their design project. Lastly, students will create a YouTube video, a PowerPoint presentation, a Google site or Prezi design to display their project.

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