A Manual for Living Lab Educational Cooperation

December 3, 2022
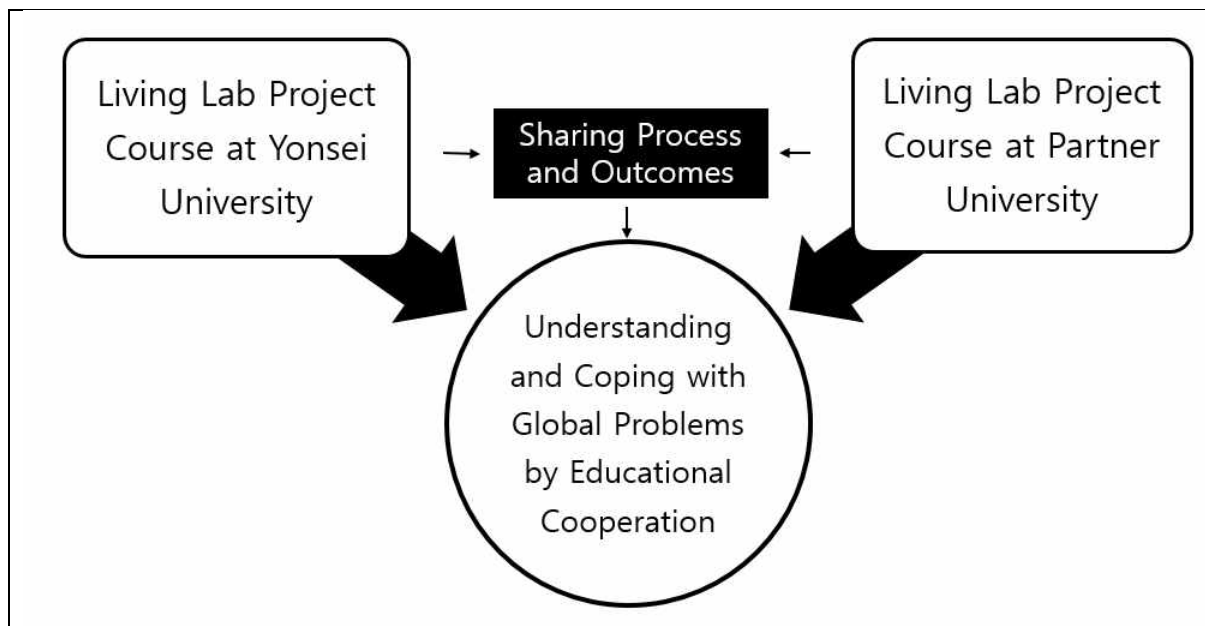
Institute for Poverty Alleviation & International Development (IPAID)

Yonsei University

[1] Project Outline

- This is a project for international educational cooperation between Yonsei University and our partner universities based on living lab (LL) activities.

- There are two phases of project implementation. In the first phase, each side implement LL project in a specific course and interact each other (via online) and share the process and outcomes of the LL project. In the second phase, both sides plan and implement a common course based on common curriculum. Also in the second phase, we can create a new model of exchange student program focused on problem solving activities.

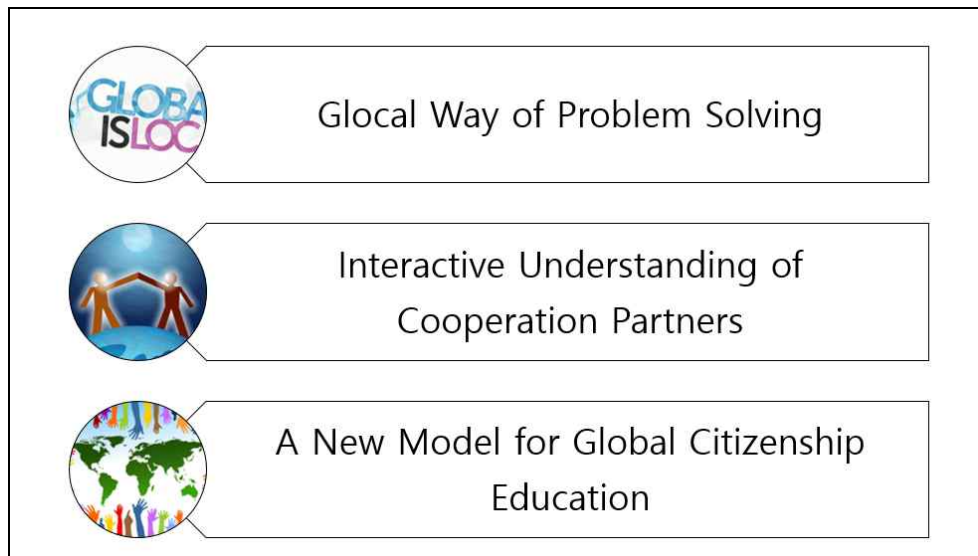- This manual is for only the first phase.

Figure 1 Project Outline

- The goals of this project are

(1) students can understand the importance of "glocal" way of problem solving. They can learn how global problems are specifically found in their neighborhood, and come up with an idea to address these problems based on their local conditions.

(2) students will understand the countries (and the specific local areas) of their partner universities via problem-based activities and interactions. They will understand a specific country better than before because they can compare and contrast the country with their own countries. They will find how similar or different the local problems are in the two sides and how each side comes up with solutions differently. In other words, they can

understand their partner country via their own region and their own problems.

(3) this kind of interactive understanding on countries and regions will enhance students' sense of global citizenship.
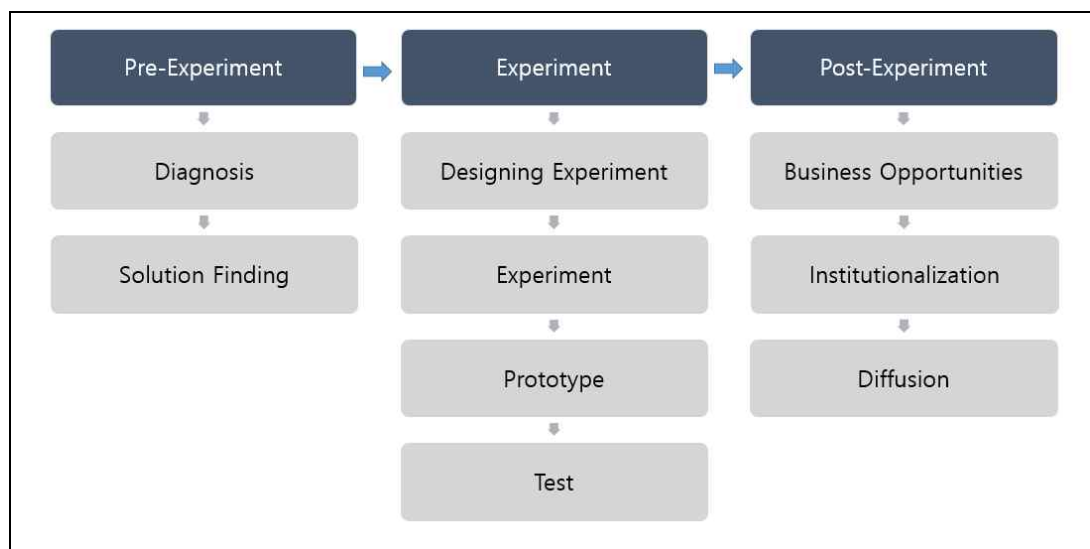
Figure 2. Goals of the Project

[2] Living Lab (LL)

- LL is a user-driven social innovation mechanism. It is organized and implemented by the initiative of local residents who want to solve their local problems.

- But residents alone cannot carry out LL projects. They are backed up by professors and researchers in local universities, activists, central and local governments, and firms. These actors cooperate to solve the local problem. This is called co-creation.

- The key aspect of LL is experiments. Participants design an experiment to solve designated local problems. They conduct experiments, produce a prototype (or a solution), and test it in their local context. If the experiment fails, they can design and implement another experiment with different ideas.

- If the experiment is successfully completed, not only they can solve local problems but also they can create values by acquiring patent of opening a new business.

- LL plays a role in addressing global problems, presumably, more effectively than international organizations and international advocacy groups. It challenges global problems such as climate change, pandemic, migration, poverty, and various types of inequality.

◆ LL proceeds in the three stages: pre-experiment, experiment, and post-experiment. In this cooperation project, we will go ahead only the pre-experiment stage. After the project is over, each side will search for additional funding opportunities to conduct the real experiment. Yonsei professors will try their best to find funding opportunities for partner universities to continue their experiments.

◆ LL has been particularly effective in European cities to transform themselves into a circular economy, and further, a carbon neutral city. Circular economy is a system in which resources are reused and recycled, instead of used and wasted, in order to change the patterns of production and consumption into a more sustainable manner.
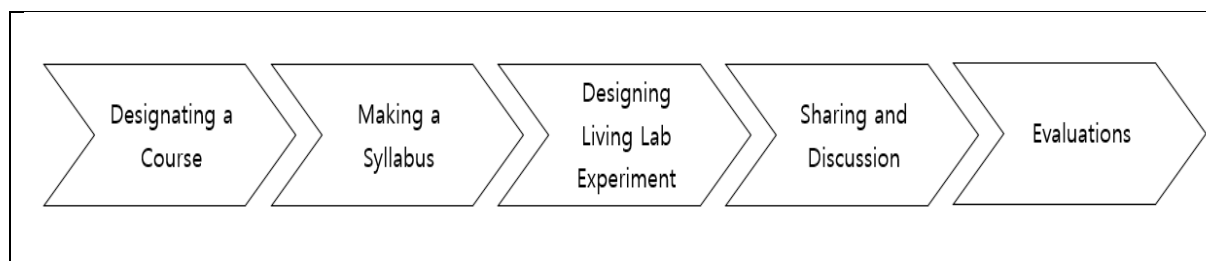
Figure 3. Three Stages of Living Lab

Pre-Experiment	Experiment	Post-Experiment
Diagnosis	Designing Experiment	Business Opportunities
Solution Finding	Experiment	Institutionalization
	Prototype	Diffusion
	Test	

[3] Project Process

Summary

Figure 4. The Whole Process

Designating a Course → Making a Syllabus → Designing Living Lab Experiment → Sharing and Discussion → Evaluations

1. Designating a Course (and Professor)

- The course could be a class in the departments of social science such as political science, public policy, economics, sociology, education, and so on. It could be also a course of natural sciences or humanities.

2. Making a Syllabus

- The professor who is in charge of the designated course should prepare a course syllabus. In the syllabus, 3-4 weeks should be assigned for LL project. When we consider the academic calendars of both sides, it could be safe to implement LL project during April in the case of the Spring Semester.

3. Designing a Living Lab Experiment

(1) Project Orientation

- This should be done in the first couple of weeks in the whole course. The professor introduces the project to students. (S)he should explain clearly the goals and specific processes of this project. Also, (S)he should announce the specific schedules and deadlines of this project.

(2) Pre-project Survey

- Professors in both side prepare pre-project and post-project survey questionnaire and conduct the surveys. Surveys will ask students about their perceptions and understandings on the partner countries, their opinions on the effectiveness of glocal solutions, and so on.

(3) Living Lab Orientation

- Professor should introduce living lab (various examples of previous projects) to students. Also, Yonsei university professor can provide a special lecture (by zoom) for this.

(4) Problem Finding

- Students are grouped (3-4 students in a group, depending on the size of class) and find their local problems. Professor should help them to find local problems by connecting students to local specialists (activists), NGOs, government, and other related persons.

- Students should decide their target problem by the given deadline. They should discuss both inside and outside the class. Their final decision should be approved by the professor. If the problem is not appropriate, the professor should encourage students to find other problems.
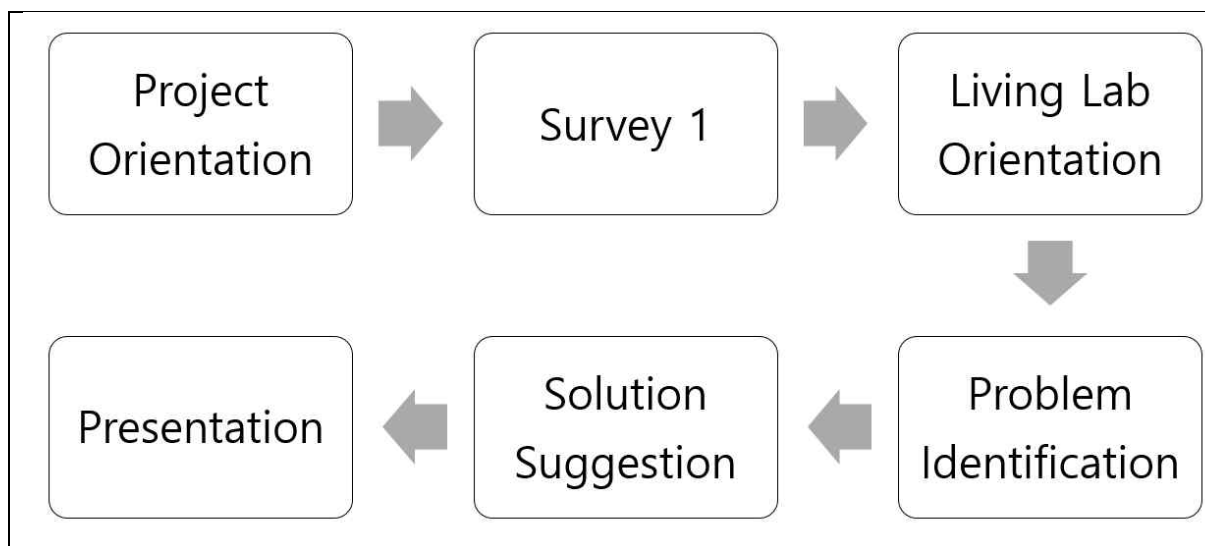
(5) Solution Suggestion

- Students come up with ideas to solve the problem. Based on their ideas, they design the experiment. Their ideas should be approved by the professor. During the idea generation process, they can meet with professors majoring in other disciplines that are related to their ideas.

(6) Presentation

- Students present their project results and discuss the projects.

Figure 5. LL Project Process

4. Sharing and Discussion

(1) Sharing

- Professors share all the information on the process of LL project from time to time via zoom meeting. During the process, they inform each other about their own progress and discuss some possible problems, differences, or any other critical issues.

- Students create a video-clip to summarize the whole process and outcomes of their projects. They upload the file in the YouTube channel of IPAID. In this way, students in the two sides share each other the LL projects.

(2) Discussion

- Students discuss about the partner university's projects. They will explore why and how the

partner students could find the specific problems and the specific solutions. In other words, they will first try to understand the partner regions and countries via the partner students' LL projects. They will further discuss the political, economic, social, and cultural conditions by which the solutions of the partner students were feasible and desirable in the partner regions.

- Students will try to apply the solutions (suggested by partner students) in their own region and find any political, economic, social, and conditions which (do not) enable them to deploy the solutions to solve their own problems.

(3) Reaction

- Students write a short report on their discussion ((2) above) and send it to their partner university. The professor in the partner university shows and explains the report to their students and discuss it.

5. Conclusions

(1) Post-experiment Survey

- Students answer to the questionnaire of the post-experiment survey. Some questions are same as the first survey but there are some new questions.

(2) Evaluations

- Professors in each side discuss the project and make suggestions for further cooperation. They also discuss for writing and publishing a research paper based on this cooperation. For this, they will have a workshop in the partner country (Yonsei team will visit the partner university).