



Syllabus and Participant Guide

2023 Sustainable Development Goals Youth Summer Camp

16 – 19 August 2023

Yonsei University International Campus, Incheon, Republic of Korea

Organized by the United Nations Office for Sustainable Development (UNOSD) of the UN Department of Economic and Social Affairs (UN DESA), the Ministry of Environment (MoE) of the Republic of Korea, and the Korea Environment Corporation (K-eco) in partnership with the Design Factory Korea (DFK) of Yonsei University.

1. Background

Since the 2030 Agenda for Sustainable Development, with 17 Sustainable Development Goals (SDGs) at its core, was adopted in 2015 by the UN Member States, countries have responded to achieve these agreed-upon goals by 2030 with their ambitious plan of action. At the mid-way point towards 2030, however, we are still far from achieving the SDGs due to multiple global crises such as climate change, pandemic, and armed conflicts. According to the SDG Progress Report of the UN Secretary General, close to half of the SDG targets are off track, and some 30% have seen no movement or even regressed below the 2015 baseline¹.

As the 2030 Agenda calls for the “participation of all countries, all stakeholders, and all people”, now it is high time for every stakeholder to accelerate SDGs implementation at all levels. One of the stakeholders – ‘Youth’ is of primary importance in forging leadership, ideas, and momentum to facilitate change and build constructive solutions. UN Secretary-General Antonio Guterres stressed young people hold the key to creative solutions, and as digital natives, they can drive innovation and accelerate progress.² Youth actively striving to further advance their knowledge, skills, and mindsets for sustainable development is vital to the successful implementation of the 2030 Agenda.

Acknowledging the role of youth in the implementation of SDGs, the UN has served as a supporting platform for young people through which their engagement in sustainable development can be advanced. For instance, “Youth 2030: The United Nations Youth Strategy” was launched in 2018 to ensure youth’s involvement in the implementation, review, and follow-up of the 2030 Agenda. In addition, a global youth event named “ECOSOC Youth Forum” has been organized to share creative ideas and innovative solutions to global problems. With more opportunities to explore innovative solutions to worldwide challenges, youth can be a major driving force for the implementation of the SDGs.

In this context, UNOSD has developed the capacity building program for youth on Sustainable Development since the office’s inception a decade ago. With the adoption of the 2030 Agenda for Sustainable Development in 2015, UNOSD began organizing the “SDGs Youth Summer Camp” annually to empower youth leaders to think critically and get engaged in implementing the SDGs. Since its first summer camp in 2017, UNOSD trained nearly 240 youth thus far.³

This year, the SDGs Youth Summer Camp focuses on the importance of water in terms of successfully achieving SDGs by 2030. Access to safe water is the most basic human need for health and well-being and will contribute to achieving other SDGs. Furthermore, this year marks a special cornerstone in the journey towards water-related SDGs as the halfway point of the “UN Water Action Decade (2018-2028)”. Taking this opportunity, this year’s camp encourages the participants to come up with innovative ideas and accelerated solutions for the successful achievement of water-related SDGs.

2. Objectives

The objectives of the “2023 SDGs Youth Summer Camp” will include, but are not limited to the following:

- Build and enhance knowledge of selected youth on the 2030 Agenda for Sustainable Development;

- Foster youth leadership skills with design-thinking, critical-thinking, and engagement through dialogues and exercises on successful water-related SDGs implementation;
- Provide opportunities for networking among youth; and
- Expand the host institution's partnership with youth leaders for the SDGs.

3. Methodologies

The “2023 SDGs Youth Summer Camp” will be held at the Yonsei University International Campus located in Incheon, Republic of Korea from 16 to 19 August. This year's summer camp will focus on the crucial role of water in achieving the SDGs.

The program will use a Design Thinking methodology which is a user-centric approach in developing accelerated solutions. Through the methodology, the participants will be able to learn how to contribute to the progress of achieving the SDGs by understanding the problems from other's points of view (understand and empathize), redefining the problems (reframe), and creating innovative solutions (ideate, prototype, and test) to address challenges. The design thinking approach allows participants to utilize empathy, systems-thinking, and critical-thinking skills to develop skills in ideation, creative thinking, collaboration, negotiation, evaluation, advocacy, and leadership.

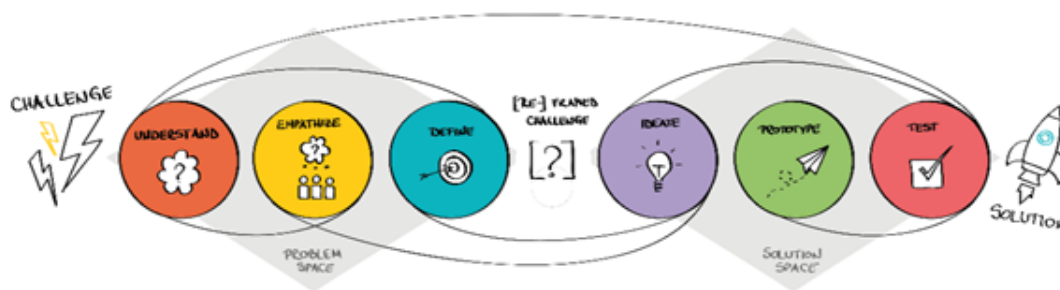


Figure. Stanford D-School Design Thinking Methodology to Develop Effective Solutions in the Decade of Action⁴

4. Learning Outcomes

After taking part in the “2023 SDGs Youth Summer Camp”, students will be able to:

- Communicate on the role of youth in implementing the 2030 Agenda for Sustainable Development;
- Gain knowledge on the importance of water for SDGs achievement and its interlinkages with other SDGs;
- Understand design thinking methodology as a tool to accelerate effective SDGs implementation; and
- Apply design thinking to the development of prototype solutions to advance the SDGs

5. Participants

Those who are born between 1995 and 2005 are eligible to apply regardless of their nationalities by submitting application forms and other required documents via Google Form. Proficiency in English is required for all participants. The participants must cover their own expenses for transportation to and from the venue (accommodation and meals provided by organizers).

6. Program and structure

The program will mainly be facilitated by professors and experts who are highly specialized in teaching and applying design thinking methodology and sustainable development (Water focused) into practice with support from coaches. Their knowledge, skills, and experiences will ensure the overall quality of the summer camp and motivate the participants to be fully engaged.

The sessions will include group work to allow active interaction among the participants and to share creative ideas on how to design and apply practical approaches to the SDGs implementation. All sessions will be conducted in English.

Agenda (Tentative)	
Day 1 (Wed), 16 August	
Time	Content
8:30–9:00 (30')	Registration I Venue Makerspace i7 lounge (Building “Veritas” B 1st Floor)
9:00–09:30 (30')	Orientation and Ice-breaking - Introduction to SDGs Youth Summer Camp Facilitator - Mr. Simon Gilby, Sustainable Development Officer, UNOSD
9:30-9:50 (20')	Opening and Welcome Remarks of the Summer Camp Speakers - Mr. Chun Kyoo Park, Head of Office, UNOSD - Dean. Helen Lee, UIC Dean and DFK Director, Yonsei University - Mr. Young-Tae Seo, Director of Green Transition Policy Division, Ministry of Environment (video message) - Mr. Seung Hoon Lee, General Manager of International Cooperation Division, K-eco
9:50-10:05 (15')	Group Photo and move to venue DFK Protoshop (Building “Wisdom” C)
10:05-10:35 (30')	Overview of SDGs and Water related SDGs Speaker - Ms. Yujeong Kim, Senior Sustainable Development Officer, UNOSD I Venue DFK Protoshop (Building “Wisdom” C)
10:35-11:00 (25')	Presentation - Mr. Zahin Razeen, Young Leader for the SDGs 2020 and Expert in Water management and security
11:00-12:00 (60')	Design Thinking Phase 1: Empathize - Design Thinking Intro, Empathy, Empathy Map Activity - Empathize with users in groups given on the 1 st step of DT - Share empathy maps Speaker - Prof. Hyun-Kyung Lee, UIC, Yonsei University Facilitator - Ms. Nanyoung Kim, DFK Coach I Venue DFK Protoshop (Building “Wisdom” C)
12:00-13:00 (60')	Lunch I Venue Na Nul Saem Cafeteria (B1 of UML Building)
13:00-14:00 (60')	<i>(Continued)</i> Design Thinking Phase 1: Empathize - Design Thinking Intro, Empathy, Empathy Map Activity - Empathize with users in groups given on the 1 st step of DT - Share empathy maps Speaker - Prof. Hyun-Kyung Lee, UIC, Yonsei University

	<p>Facilitator - Ms. Nanyoung Kim, DFK Coach I Venue DFK Protoshop (Building "Wisdom" C)</p>
14:00-15:00 (60')	<p>Water project: GIST 'Hope Water Purifier' and its outreach Speaker - Prof. Kyoung-Woong Kim, Earth Science and Environmental Engineering, GIST (Gwangju Institute of Science and Technology) I Venue DFK Ideashop (Building "Veritas" B206)</p>
15:00-16:00 (60')	<p>Water project: 'Seven Wonders for Water' Speaker - Prof. Kyoung-Woong Kim, Earth Science and Environmental Engineering, GIST (Gwangju Institute of Science and Technology) I Venue DFK Ideashop (Building "Veritas" B206)</p>
16:00-17:00 (60')	<p>Group activity - group activity based on the story of 'Seven Wonders for Safe Drinking Water' project Facilitator - Prof. Kyoung-Woong Kim, Earth Science and Environmental Engineering, GIST (Gwangju Institute of Science and Technology) I Venue DFK Ideashop (Building "Veritas" B206)</p>
17:00-18:00 (60')	<p>Group presentation - Put together material for presentation (30') - Group presentations (30') Facilitator - Prof. Kyoung-Woong Kim, Earth Science and Environmental Engineering, GIST (Gwangju Institute of Science and Technology) I Venue DFK Ideashop (Building "Veritas" B206)</p>

Day 2 (Thu), 17 August	
Time	Content
9:30–12:00 (150')	<p>Special Lecture & Program Learning on Blender @ i7 Makers</p> <p>Speaker</p> <ul style="list-style-type: none"> - Mr. Jason Lee, Designer Director and Experience Designer, iloun Architecture and Design Office <p>Facilitators</p> <ul style="list-style-type: none"> - Prof. Hyun-Kyung Lee, UIC, Yonsei University - Prof. Koogin Han, UIC, Yonsei University - Ms. Nanyoung Kim, DFK Coach <p>I Venue Makerspace Prototyping Room (Building "Veritas" B basement space D133)</p>
12:00-13:00 (60')	<p>Lunch</p> <p>I Venue Na Nul Saem Cafeteria (B1 of UML Building)</p>
13:00-14:00 (60')	<p><i>(Continued)</i> Special Lecture & Program Learning on Blender @ i7 Makers</p> <p>Speaker</p> <ul style="list-style-type: none"> - Mr. Jason Lee, Designer Director and Experience Designer, iloun Architecture and Design Office <p>Facilitators</p> <ul style="list-style-type: none"> - Prof. Hyun-Kyung Lee, UIC, Yonsei University - Prof. Koogin Han, UIC, Yonsei University - Ms. Nanyoung Kim, DFK Coach <p>I Venue Makerspace Prototyping Room (Building "Veritas" B basement space D133)</p>
14:00-17:00 (180')	<p>Design Thinking Phase 2: Define / Ideate</p> <ul style="list-style-type: none"> - Make a problem statement - Ideate based on group research for successful SDG implementation - Ideate interactive groups - Mid-pitch: share output from define and ideate <p>Speaker</p> <ul style="list-style-type: none"> - Prof. Francis D. Kim (Chulalongkorn University), Integrated Innovation Ideation Expert Facilitator <p>Facilitators</p> <ul style="list-style-type: none"> - Prof. Hyun-Kyung Lee, UIC, Yonsei University - Prof. Jae-yun Ho, UIC, Yonsei University <p>I Venue DFK Ideashop (Building "Veritas" B206)</p>

Day 3 (Fri), 18 August	
Time	Content
10:00-12:00 (120')	<p>Design Thinking Phase 3: Prototyping Solutions</p> <ul style="list-style-type: none"> - Prototyping for the SDGs - How? - Practical exercise @ i7 Makers - Experience @ makerspace - Practical group work on prototyping <p>Speaker</p> <ul style="list-style-type: none"> - Mr. Jason Lee, Designer Director and Experience Designer, iloun Architecture and Design Office <p>Facilitators</p> <ul style="list-style-type: none"> - Prof. Francis D. Kim, Chulalongkorn School of Integrated Innovation, Chulalongkorn University - Prof. Hyun-Kyung Lee, UIC, Yonsei University - Prof. Koogin Han, UIC, Yonsei University <p>I Venue Makerspace Prototyping Room (Building "Veritas" B basement space D133)</p>
12:00-13:00 (60')	<p>Lunch</p> <p>I Venue Na Nul Saem Cafeteria (B1 of UML Building)</p>
13:00-15:00 (120')	<p><i>(Continued)</i> Design Thinking Phase 3: Prototyping Solutions</p> <ul style="list-style-type: none"> - Prototyping for the SDGs - How? - Practical exercise @ i7 Makers - Experience @ makerspace - Practical group work on prototyping <p>Speaker</p> <ul style="list-style-type: none"> - Mr. Jason Lee, Designer Director and Experience Designer, iloun Architecture and Design Office <p>Facilitators</p> <ul style="list-style-type: none"> - Prof. Francis D. Kim, Chulalongkorn School of Integrated Innovation, Chulalongkorn University - Prof. Hyun-Kyung Lee, UIC, Yonsei University - Prof. Koogin Han, UIC, Yonsei University <p>I Venue DFK Ideashop (Building "Veritas" B206)</p>
15:00-18:00 (180')	<p>Continued Ideation, Iteration, Design Management Strategy</p> <p>Speaker</p> <ul style="list-style-type: none"> - Prof. Koogin Han, Design Business Strategist, UIC, Yonsei University <p>Facilitator</p> <ul style="list-style-type: none"> - Professors, Coach, Team Coaches <p>I Venue DFK Ideashop (Building "Veritas" B206)</p>

Day 4 (Sat), 19 August	
Time	Content
10:00-12:00 (120')	<p>Design Thinking Phase 4: Deliver, Testing, Business Roadmap</p> <p>Speaker</p> <ul style="list-style-type: none"> - Prof. Jae-yun Ho, Business Roadmap & Strategist, UIC, Yonsei University <p>Facilitators</p> <ul style="list-style-type: none"> - All faculty, Yonsei University <p>I Venue DFK Ideashop (Building "Veritas" B206)</p>
12:00-13:00 (60')	<p>Lunch</p> <p>I Venue Na Nul Saem Cafeteria (B1 of UML Building)</p>
13:00-15:30 (150')	<p>Final Group Presentation</p> <p>Peer Review Session</p> <p>Facilitators</p> <ul style="list-style-type: none"> - Professors, Coaches, Team Coaches <p>I Venue Makerspace i7 lounge (Building "Veritas" B 1st Floor)</p>
15:30-17:00 (90')	<p>Conclusion</p> <ul style="list-style-type: none"> - Presentation Feedback <p>Closing Remarks</p> <ul style="list-style-type: none"> - Mr. Chun Kyoo Park, Head of Office, UNOSD - Prof. Hyun-Kyung Lee, UIC, Yonsei University <p>I Venue Makerspace i7 lounge (Building "Veritas" B 1st Floor)</p>

7. Background Readings

- Designing a New Empathy-Oriented Prototyping Toolkit for the Design Thinking Process: Creativity and Design Sensibility (shared as an attachment)
- Design Thinking with Appropriate Technology for Improving Social Sustainability: Critical and Comprehensive Criteria (shared as an attachment)
- Performance and mechanism of arsenic removal from water by a nanofiltration membrane (shared as an attachment)
- Field Guide to Human-Centered Design, IDEO (shared as an attachment)
- Water project: GIST 'Hope Water Purifier' and its outreach
<https://www.ctc-n.org/sites/www.ctc-n.org/files/4.%20Gravity-Driven%20Membrane%20%28GDM%29%20Technology%20%28Kyoung-Woong%20Kim%29.pdf>
- Water project: 'Seven Wonders for Safe Water' https://ieri.gist.ac.kr/ierieng/sub02_03.do
- Book "Seven Wonders: Everyday Things for a Healthier Planet" by [John C. Ryan \(Author\)](#)
- [International Youth Day 2023 on "Green Skills for Youth: Towards a Sustainable World" | Division for Inclusive Social Development \(DISD\) \(un.org\)](#)
- United Nations The Sustainable Development Goals Report (2023) Accessed at: <https://unstats.un.org/sdgs/report/2023/>
- Introduction to the Water Action Decade <http://sdgs.un.org/topics/water-and-sanitation/wateractiondecade>
- Cserhati, Agnes (2019) The Power of Innovation and Design Thinking in Implementing the 2030 Agenda for Sustainable Development. United Nations System Staff College. Accessed at: <https://www.unssc.org/news-and-insights/blog/power-innovation-and-design-thinking-implementing-2030-agenda-sustainable/>

Videos

- United Nations (2018) "Do you know all 17 SDGs?" <https://www.youtube.com/watch?v=0XTBYMfZyrM>
- UNDP – "This is how the UN moves the SDGs from paper to practice" <https://www.youtube.com/watch?v=TH8lsHLQ2mQ>
- Design Thinking: Solving Life's Problems, Suresh Jayakar <https://youtu.be/UQYoWwHg3qA>
- The Explainer: What Is Design Thinking?, Harvard Business Review <https://youtu.be/WI3B54m6SU>
- How to use 3D Printers inking? <https://www.youtube.com/watch?v=XoiC5QgRdww>

8. DOs and DON'Ts

DOs:

- Please be on time for all scheduled program
- Notify the staffs in advance if you are late for certain programs due to unavoidable circumstances
- Report to the organizers if you develop symptoms related to Covid-19 or Influenza
- Maintain basic hygienic practice for safer gathering i.e. keep hands clean by use of hand sanitizer, cover coughs/sneezes and wear face mask if you are at high risk of illness
- Follow instructions and guidance from the staff and instructors
- Dress properly and always wear given name-tags during the camp
- Keep your dormitories clean and organized
- Take responsibility for your action during the whole program and respect other participants
- Pay attention to speakers and participants and actively participate in programmes
- Follow **UN Values (Integrity, Professionalism, Respect for diversity)** during the entirety of the course, including group discussions and peer-to-peer engagement

DON'Ts:

- Do not show unsuitable behaviors for the camp (* drinking alcohol, gambling, bullying, fighting, smoking in the venue and dormitories are unacceptable)
- Do not present profanity, aggressive behavior and sexual or verbal harassment to other participants and staff members
- Do not disturb the classroom at any point of time by shouting or using abusive words
- Do not leave dormitory during curfew hours (12-5 AM) nor stay out overnight except with a few cases below:
 - To get medical treatment (examination) or prescription of medication (*confirmed by staff members in advance)
 - Exceptional cases that are recognized by the staff
- Do not damage nor steal personal/camp facilities and supplies
- Do not endanger the health and safety of staff and participants

✘NOTE: During the camp, any claims brought against the rules above will NOT be covered by the liability insurance. Please make sure that zero-tolerance policy will be applied for any violation of these rules above and will be expelled from the camp.

<Makerspace i7 & Design Factory Korea(DFK) Facility Use Manual>

- General
 - Use the tools and worktables in the correct way of each usage.
 - Replace and organize all the tools after using it.
 - Make restitutions for tools or facilities if changed, lost or damaged deliberately.
 - Be responsible for any accidents and injuries while using facilities on your own.
 - Wear proper clothing for using the tools (Slippers, loose shirts not recommended)
 - Be well-informed with emergency evacuation so that we can escape safely
 - Make sure that you can be prohibited from using the facility if you don't follow below instructions.
 1. Unauthorized movement, processing, and removal of objects without the permission of the manager
 2. Improper use of equipment and tools to cause harm to other users
 3. Mischief that may interfere with or threaten the work of others
 4. Bringing in animals, fire hazards, flammable substances that cause ignition
 5. Other acts that harm public order and good manners
- Tools and devices
 - Wear the protective equipment properly when using the tools.
 - Turn off the devices and get out of the place immediately once you notice fire smoke. And then notify the staff and follow the instructions.
 - Use only the ingredients that are introduced and prepared by the staff.
 - Take a facility safety course before using devices and tools.

9. Criteria for Final Presentations and Evaluation

Creativity/ Innovativeness	The innovativeness of the idea to solve an evidence-based problem or issue
Compatibility	The compatibility of the idea to the 2030 Agenda and the Sustainable Development Goals and specific targets
Plausibility	The applicability and feasibility of the solution for practical implementation to accelerate the SDGs
Process	The application of the Design Thinking Methodology throughout the whole design process
Influence/Pitch delivery	The ability of the presentation and presenters to captivate and persuade the audience

10. Contact information

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