

Education for Sustainability with System Design Thinking

Student Case Study Group
Project Guide



About this Guide

This guide is designed to help you stay organized and work effectively while you complete your case study group project. It will also provide you with helpful strategies to collaborate with other members in your group and communicate with your instructors.

This guide includes:

- An overview of the project's schedule
- Links to forms and documents to support you along the way
- Best practice strategies for communicating with peers
- Instructions for reaching out to your instructors

Learning Schedule

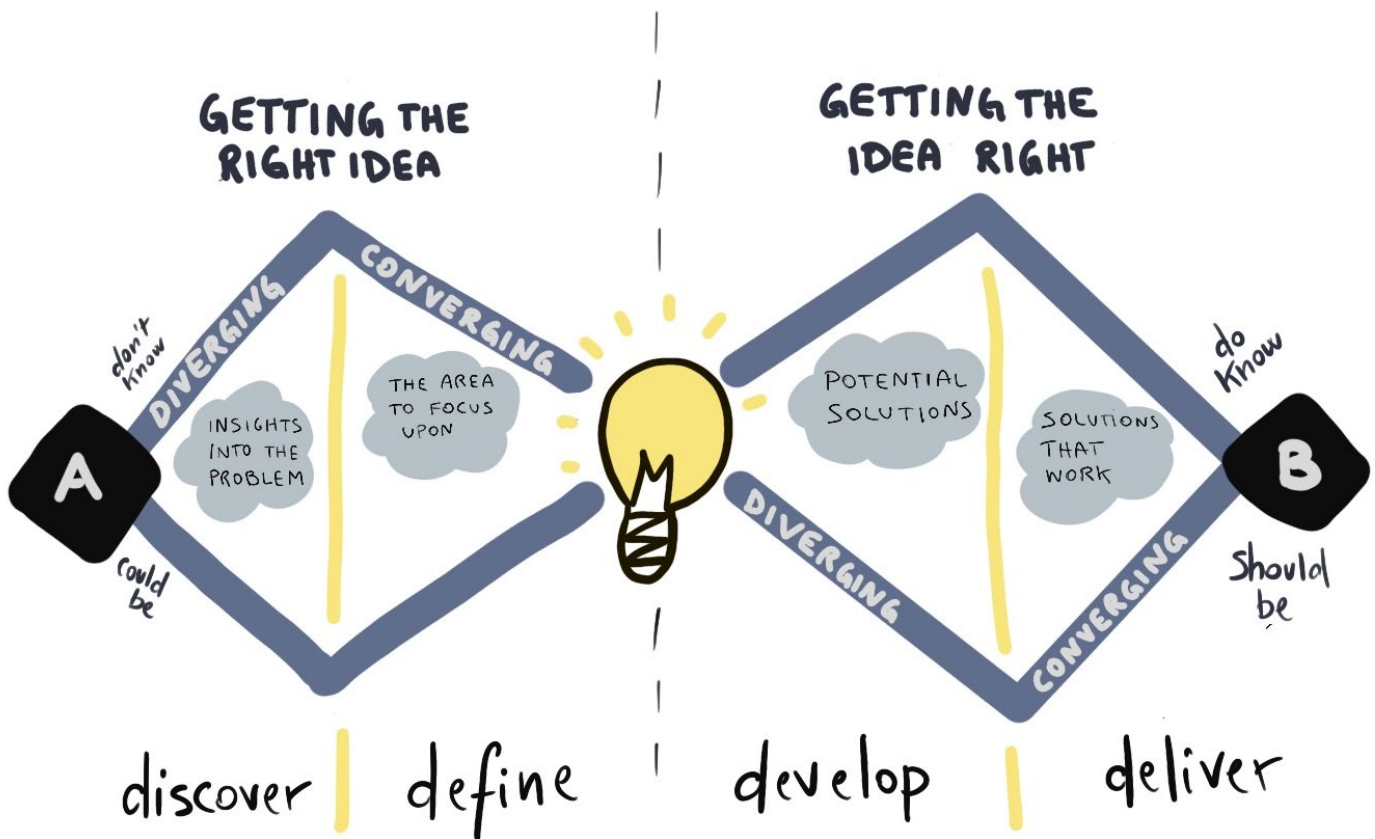
Module	Class Concepts / Guest Sessions	Topics, Readings, and Activities
1	<ul style="list-style-type: none"> Kick Off - Today Agenda Pre-COIL workshop with Humber Global <ul style="list-style-type: none"> Kick Off Event Project Introduction Student introductions -get to know your team Google Drive Tour Student Files Compulsory and Optional documents Explain groups and weekly assignments <p><i>Please make sure your camera and audio are working before joining the class.</i></p> <ul style="list-style-type: none"> Pre-COIL workshop: Introductory workshop with Case Study Subject 	<ul style="list-style-type: none"> Due before class: complete your individual introduction and read the case Watch videos on Double Diamond and Iceberg System Design Thinking Report 1 Yang, S., Song, Y., & Tong, S. (2017). <i>Sustainable Retailing in the Fashion Industry: A Systematic Literature Review</i>
2	<ul style="list-style-type: none"> System design thinking workshop – live session or prerecorded video Live Coaching session - Discover: brainstorming ideas <p>Students are expected to stay for 1.5 – 2 hours to meet with coaches</p>	<ul style="list-style-type: none"> Review before class: Double diamond design thinking Read before class: System Design Thinking Group work Report 2
3	<ul style="list-style-type: none"> Creativity workshop - prerecorded Live Coaching session - Discover: expanding ideas <p>Students are expected to stay from 1.5 – 2 hours and meet 2 coaches for 30 minutes</p>	<ul style="list-style-type: none"> Read before class: System Design Thinking Group work Report 3 Finish the Empathy Map

Module	Class Concepts / Guest Sessions	Topics, Readings, and Activities
4	<ul style="list-style-type: none"> • Live Coaching session - Define <p>Students are expected to stay for 1.5 – 2 hours to meet with coaches</p>	<ul style="list-style-type: none"> • Group work • Report 4 • Sweeney, L. B. (2001). <i>Systems Thinking: A Means to Understanding Our Complex World. In When a Butterfly Sneezes: A Guide for Helping Kids Explore Interconnections in Our World Through Favorite Stories</i>
5	<ul style="list-style-type: none"> • Live Coaching session - Develop: refining prototype <p>Students are expected to stay for 1.5 – 2 hours to meet with coaches</p>	<ul style="list-style-type: none"> • Group work • Report 5
6	<ul style="list-style-type: none"> • Live Coaching session - Deliver <p>Students are expected to stay for 1.5 – 2 hours to meet with coaches</p>	<ul style="list-style-type: none"> • Group work • Final Presentation

Double Diamond Framework

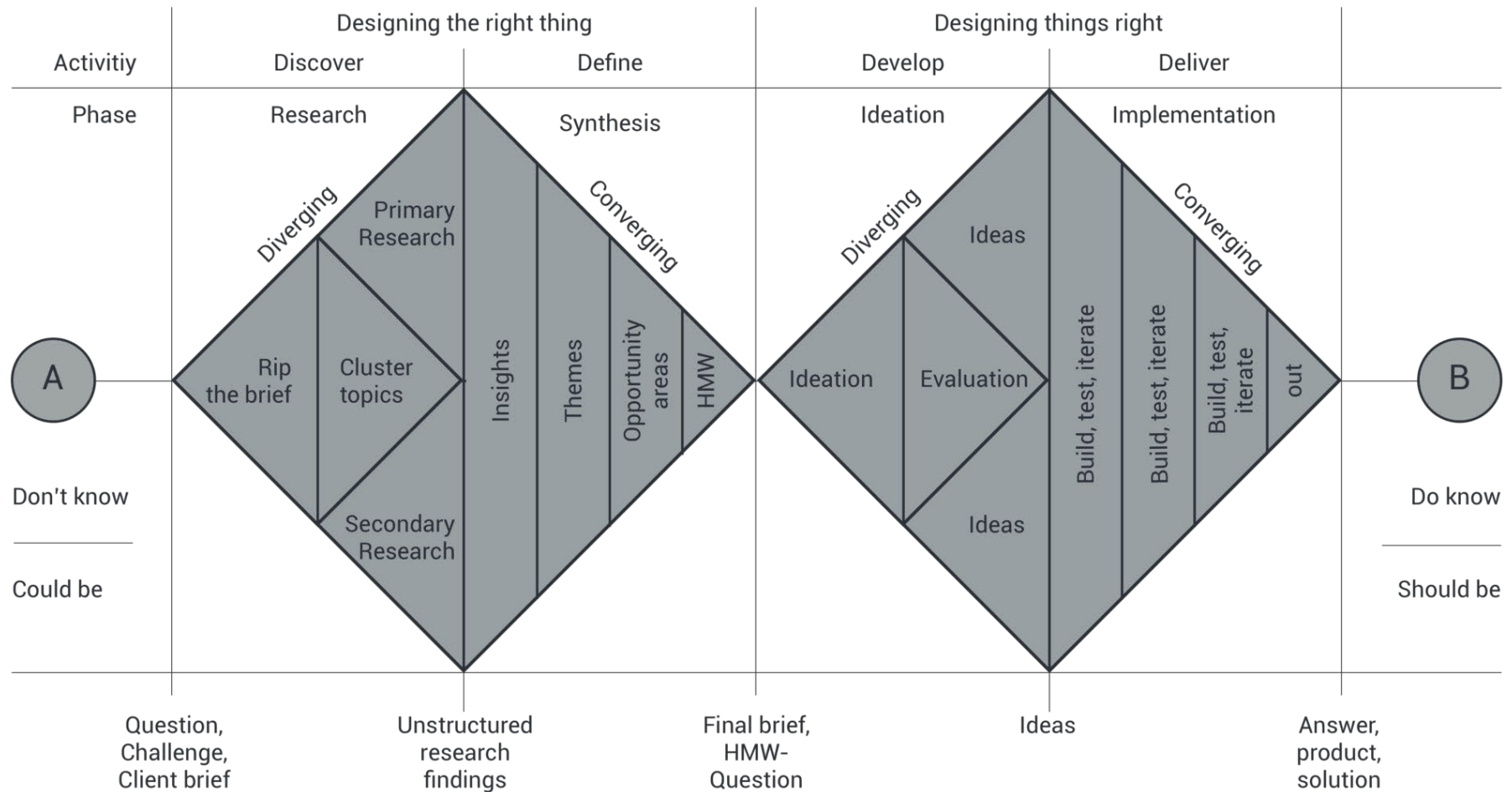
This project follows the Double Diamond Design Thinking Framework. There are four phases:

- Discover:** Understand what the problem is, this means speaking to and spending time with people who are affected by the issues.
- Define:** The insight gathered from the discovery phase can help to define the challenge in a different way.
- Develop:** Give different answers to the defined problem, seeking inspiration from elsewhere and co-designing with a range of different people.
- Deliver:** Involves testing out different solutions at small-scale, rejecting those that will not work and improving the ones that will.



Source: Dan Nessler, Willemien Brand

The following is a more detailed breakdown of the Double Diamond framework.



Dan Nesler, 2016 [Image Source](#)

Homework Forms and Documents

Throughout the project you will be required to complete the following forms and documents as part of your homework. Note that some tasks are to be completed as a group, and some individually.

Beginning of Project | Week 0 – 1

- Group Members discuss role fit under [Belbin's Team Roles](#) and assume a role.
- Group members complete together [Group Resume](#)
- Complete together [Team Contract](#)
- Plan the project with assigned deadlines and responsibilities

Mid Project | Week 3 – 4

- Individually: Sample [Self-Evaluation Form for Group Work](#)
- Complete individually "Group Assessment Process". Following that, as a group plan for improvements. [Group Process Assessment](#)

End of Project | Week 5 – 6

To be completed individually:

- Complete [Peer Evaluation Form for Group Work](#)
- Sample [Self-Evaluation Form for Group Work](#)



Reflection Papers

Throughout the project you will be responsible for completed several reflection papers on your experiences, insight, challenges, and development. The purpose of the reflection papers is to provide you with an opportunity to improve on your strengths and learn from your challenges.

Final Evaluation

Your final evaluation and grade will be based on the following [rubric](#). It's important to understand the project expectations and discuss any questions with your instructor throughout the project.



Guest Speaker

A guest speaker will present to the class during the first half of the project. It is important to prepare one week in advance for the speaker so that you can make the best use of their time.

Here are some points to help you prepare:

- Research the speaker's company and past work. Learn about the company's history, values, products, strategies, workforce, challenges, media presence, and finances.
- Create a list of questions that would help support your project. These questions should be about information unavailable elsewhere.

During the presentation, make sure you are listening closely and taking notes. After the speaker, reflect on what they have said and consider how you will implement what you have learned.



Weekly Group Work

Overview

Each team must create a weekly report to be shared on Google Drive at the end of each week, reporting the process of your project.

Group Requirements

Your group is responsible for meeting twice every week. Sessions should last between 2.5 – 3 hours.

Organizing your Meetings

You may use any online platform to meet such as Google Hangouts, Microsoft Teams, or Zoom.

Ensure that everyone in your group has the appropriate software for the meeting

Weekly Group Reports

Each week your group is required to submit a report.

The group reports must include:

- Discussion minutes
- Relevant images, videos, or documents
- At least one report must include the Field Trip notes and images.

Field Trip Notes and Images

A field trip is an outside physical exploration, such as visiting a site, or location. *Your group is responsible for including field trip notes on at least one of your weekly group reports.*

The notes should include images, descriptions, summaries, and other details of your work.



Group Reports

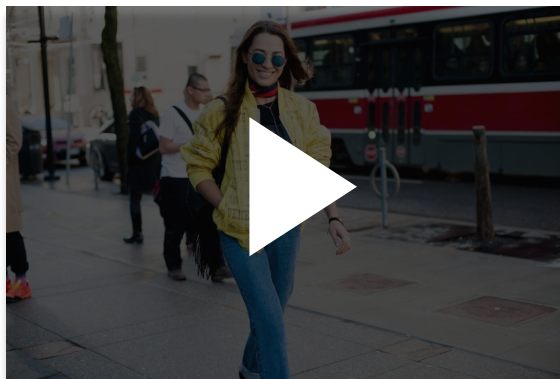
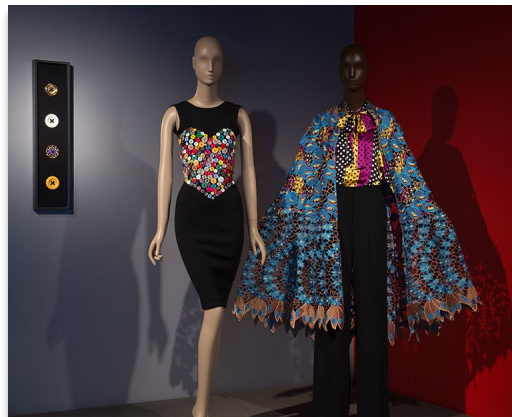
Discussion Minutes

Writing meeting minutes during meetings are optional and recommended. Team members should assign one meeting note-taker or take turns creating the minutes.

You can use the [Meeting Minutes template here](#).

Images, Videos, and Documents

Your report should include any images, videos, or related documents that highlight your group's weekly progress. Each item should include brief description summarizing its relevance.



Group Work Best Practices

The following are some best practice strategies to help ensure your group is working collaboratively and effectively.

Assign Weekly Roles

Your group should assign and rotate the roles and responsibilities for each weekly meeting. This will ensure that all tasks are shared between all group members and help improve efficiency. For example, taking minutes during the meeting, completing a research task, or writing the summary notes on the report.

Writing Minutes

Meeting minutes are intended to summarize the main ideas and decisions on what was discussed during a meeting. They are not written transcripts of everything said. You can use the following [minutes template here](#).

Your minutes should include:

- The date and who was in attendance
- A summary of each topic that was addressed, such as an agenda
- Brief notes on the main ideas discussed
- Group decisions on a particular strategy or direction
- Any next steps, who will complete them, and by when



Communicating with Group Members

Communication and collaboration are essential for a successful working group. Every member should understand their responsibilities and expectations and be able to work together.

- Exchange emails and contact information with everyone in the group. Decide on meeting times that are convenient for everyone.
- When discussing, ask follow up questions such as “could you give an example,” or “could you describe what would that look like?”
- Ask members what their strengths are and what they would like to work on.
- Communicate clear and realistic timelines. For example, instead of saying “Great, Kieran will get that done.” say, “Kieran, will you be able to complete that by the end of the day on Thursday?”
- Encourage participation from everyone. For example, “Let’s go around and hear everyone’s thoughts on this.”

Communicating with Instructors

Your instructors are available to provide guidance and help problem solve issues that may emerge within your group.

- Email your instructor if you are unable to resolve any conflicts within your group.
- Arrange a meeting or touchpoint with your instructor if you need additional support.
- Throughout the project, you will be required to complete a short status check survey. This is another opportunity to reach out to your instructor to raise any concerns.



Immersive Design Thinking Experience

At each stage of the project (Discover, Define, Develop, Deliver), you are encouraged to explore the Immersive Design Thinking Experience.

Each stage of the design thinking model is represented by a different virtual environment. Navigate around the environment to uncover different artifacts and prompt questions related to the stages. This exploration will help you generate ideas, and better understand the purpose and value of each design thinking stage.



Source Material

- *Double Diamond: A structured approach to tackle challenges in four phases, from exploring to taking focused actions.* Ilaria Doria, Darpan Sunwar, 2021.
<https://openpracticelibrary.com/practice/double-diamond/>
- *How to apply a design thinking, HCD, UX or any creative process from scratch,* Dan Nesler, 2016. <https://medium.com/digital-experience-design/how-to-apply-a-design-thinking-hcd-ux-or-any-creative-process-from-scratch-b8786efbf812>
- *The essentials of Theory U: core principles and applications'* book. Scharmer, C. O. (2018). *The essentials of Theory U: core principles and applications* (First edition). BK, Berrett-Koehler Publishers, Inc., a BK Business book.
- Yang, S., Song, Y., & Tong, S. (2017). *Sustainable Retailing in the Fashion Industry: A Systematic Literature Review*
- All images used under license from Shutterstock.com