4.0 **Module 4**

Design for Public Spaces

20 hours (13 in school and 7 at home)

Design Thinking

Design Projects

Exposure 1   - Introduction to Public Spaces

Exposure 2   - Examples of design for Public Spaces

Task 4.1 (at School + Home)   - Research and Analysis

Task 4.2 (at School + Home)   - Ideation, Prototyping and Feedback

Final Output   - A presentation of the project

                                  + Reflections, Self Assessment and References

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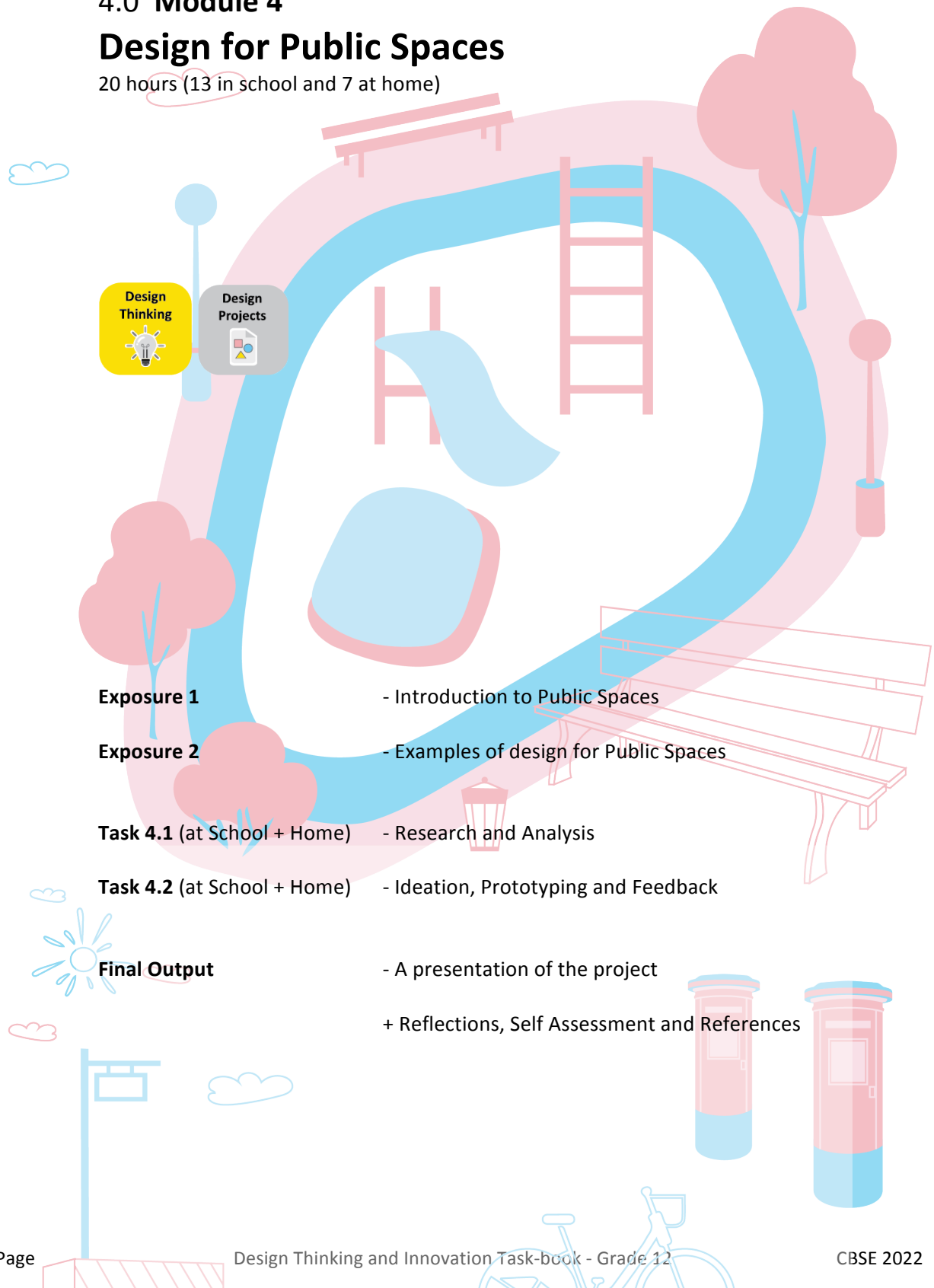
4.0 Module 4

Design Project:
Design for Public Spaces
(20 hours at school + 7 hours at home)

Introduction

This module looks at design for public spaces. Public spaces are common facilities used by many. This includes the design of artifacts and services that are shared. These designs tend to be the following:
a. Common
b. Public
c. Duty driven
d. Community
e. Citizenship
f. Trusteeship

Aim of the Course

To expose students (Grade 12) to fundamentals and principles of public design and application of this to design of artifacts and services. This task is a group task where the students explore artifacts and services that are part of the public design space.
These could include drinking water, playgrounds, parks, gardens, museums, airports, bus/railway stations, bus stops, public toilets, libraries, etc.

Place:

Place: Task 4.1, 4.2, 4.3, 4.4, and 4.5 done at School and at home

Grouping:

Grouping: Class tasks are done in groups of 3-4 and Home tasks are individually

Equipment:

Equipment: Sketchbooks for sketching and taking notes. students may use digital devices like computers or tablets to collate information and make presentations (if available, but not necessary)
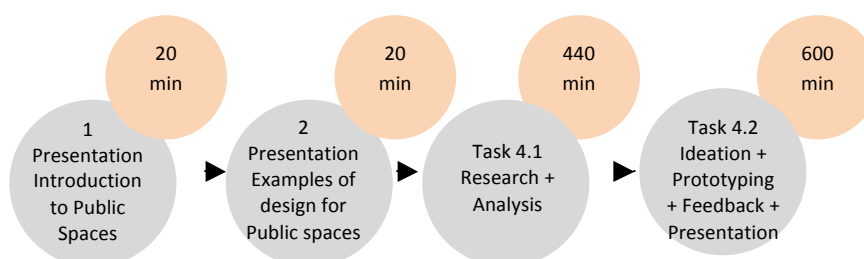
Exposures

Exposure 1: Introduction to Public Spaces

Exposure 2: Examples of design for Public Spaces

Task Sequence

Task 4.1 + Task 4.2

20 min	20 min	440 min	600 min
1 Presentation Introduction to Public Spaces	2 Presentation Examples of design for Public spaces	Task 4.1 Research + Analysis	Task 4.2 Ideation + Prototyping + Feedback + Presentation

Design Thinking & Innovation Process involvement:

This task involves the following phases of the DT&I Process:
Phase 1. Observe/Empathise/Research (observation of Public spaces and services)
Phase 2. Understand/Analyse/Define (Analysis of the public space)
Phase 3. Ideate/Alternate/Create (trying creative alternatives)
Phase 4. Build/Prototype/Detail (making prototypes, presentation)
Phase 5. Evaluate/Reflect/Implement (feedback from others)

Mapping SDG Goals:

The following SDG goals need to be considered while solving this task. While documenting elements and expressions, do think of gender equality and reduced inequalities and concern for life on our planet.

Task 4:

Task 4.0:

Done at School + Home

Overall Task (Task 4.0 = 4.1 + 4.2)

Topic title:

Design Thinking Process Project:
Designing for Public Space
- for community needs

Theme:

Exploring Common Community spaces and services:

We are social. We share, collaborate, play with each other, work together, form partnerships and collaborate to form teams. We share products, artifacts and services that are of importance to the social spaces. In addition to this, there are many social issues that need to be solved. Building empathy and concern for the problems of others is the key to designing for social spaces.

You may choose any one of these attributes to work with:
- collective, common, shared, public, group

The final solutions could be solving problems connected with any of these issues:

a. Drinking water,

b. Playgrounds, parks, gardens, museums,

c. Airports, bus/railway stations, bus stops,

d. Public toilets,

e. Libraries,

f. Etc.

The task involves the following steps:

0. Selection of problem to solve

2.1a Observation and asking Questions (do brainstorming + mindmapping)

2.1b Primary research by conversing with users

2.1c Secondary research by finding out already existing information

2.1d Analysis (do catogorisation and activity mapping)

2.2a Ideation and alternate concepts

2.2b Soft Prototyping and feedback

2.2c Presentation and evaluation

Task 4.1:

Done at School + Home

Task 4.1 = 4.1a + 4.1b + 4.1c + 4.1d
School Hours: 6 and Home Hours: 3
Done in groups of 3-4 at School and individually at Home

Task Title:

Understanding the problem area/space and analysis:

Task 4.1a:

Done at School

Task 4.1a
School Hours: 2
Done in groups of 3-4 at School

Topic title:

Observation and Ask Questions

School hours: 2, done individually

1. Designing for a public space artifact or service could involve any of the following factors:
a. Sharing
b. Collective
c. Common
d. Free and Open

2. Make a list of public spaces or services that you would like to design that could involve any of the above mentioned factors
These are some examples that you could choose from:
a. Design of a Cycle Stand in your school or a Bus Stop
b. Design of common facilities for newspaper reading
c. Design of Signage for the Playground
d. Design of posters on health and wellbeing
e. Payment of fees at the school office
e. Etc.

3. Ask the following questions about the above subject
What? Why? How? Whom? Where? When? etc.
1. Understand the subject well by first **Brainstorming** about it, noting down keywords and then making a **Mindmap** to look at the subject from different points of view and perspectives
Output 2.1a: Make a mindmap of the selected artifact – sub-topics, issues, problems, areas, users, +ves and –ves, etc.

Task 4.1b:

Done at School

Task 4.1b:

School hours: 2, Done in groups of 3-4 at School

Task Title:

Primary Research:

The Primary research involves the following:

1. Identify the primary users

2. Converse with the people involved with this activity to get a better understanding (take down notes), try to understand the activity from the user's point of view (empathize with the user)

3. Identify the objects that are involved and understand how it works (document these)

4. Document through photography or sketching the different aspects of the problem being solved

Output 2.1b: Make a summary presentation involving images and short text in form of a report or slides (around 6 to 10 pages or slides)

Task 4.1c:

Done at Home

Task 4.1c:

Home hours: 2, Done individually at Home

Task Title:

Secondary Research:

Secondary research as the name indicates is collection of information from secondary resources. These could be from books, publications, newspapers, talking to experts and the internet. As someone else has written or spoken about the subject, you need to keep note down the reference details.

1. Analyze your topic into sub-topics and take-up one of these for further research and understanding

2. Search for information on a media that is accessible to you. Take down notes as points. Mark important aspects

Output 2.1c: Collate the information involving images and short text in form of a report or slides (around 3 to 4 pages or 6-8 slides)

Task 4.1d:

Done at School

Task 4.1d

School Hours: 2 and Home hours 1

Done in groups of 3-4 at School and Done individually at Home

Task Title:

Analysing the problem to be solved:

1. Collate all the information as points (you could use sticky notes)

2. Classify the information into different categories according to **affinities** (some

may fit in multiple categories so replicate them)

3. **Prioritize** the information within the categories according to priority/ importance

4. Make an **Activity Map** of the interactions between the public spaces, artifacts and services and people

4. Identify issues or problems that can be solved

Output 3.1d: Analysis of the Public Problem Space along with the activity map to be made into slides

Task 4.2

Task 4.2 = 4.2a + 4.2b + 4.2c
School Hours: 7 and Home Hours: 4
Done individually at School and Home

Task Title:

Ideation + Prototyping + Presentation:

Task 4.2a

Task 4.2a
Home hours: 3
Done individually at Home

Topic title:

Ideation on Creative Design Solution Possibilities + Shortlisting of Ideas

1. Brainstorm, Ideate on possible creative solutions and sketch these out + number or name these ideas

2. Collate all the good ideas together and short-list them according to their experiential potential and ease of implementation

Output 4.2a: Make a presentation of the alternate ideas and the shortlisted one in 3 slides (alternate sketches + short-listed idea)

Task 4.2b

Task 4.2b
School hours: 4
Done individually at School

Topic title:

Design Solution Mock-ups + Feedback

1. Select the best one out of your ideation and finalise it with details.

2. Detail out the final selected solution as sketches: the details could be about its form, colors, materials, technology, etc.

3. Make a mock-up of your final idea in actual size using clay or paper/ cardboard (optional)

4. Show the sketches /mock-up to potential users and get feedback

5. Incorporate suggestions from the feedback in your design

6. Make the final sketch of your design (with an optional paper prototype)

Output 4.2b: Make a presentation of these in 3 slides (mock-up + feedback + details)

Task 4.2c

School hours: 3 and Home hours: 1
Done individually at School and Home

Topic title:

Design Solution Final Presentation and Documentation

Prepare a presentation (of 6-8 minutes duration) to include all the stages of your project:

a. Title of the Public Space Design Project or Problem Statement
b. Your Name
c. Summary/content listing of your presentation
d. Insights from Primary and Secondary Research
e. Analysis
f. Alternate Concepts (sketches + quick scenarios + concept models)
g. Final Concept sketch and its unique features
h. Prototype /Mock-up (optional)
k. User feedback on your final solution
l. Future steps and suggestions
m. Full References (Learn how to do references)
n. Acknowledgments – to all who have helped

Output 4.2c: A presentation (6-8 minutes – roughly 15 to 25 slides) explaining the Project outcome along with Process
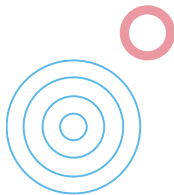
Reflection:

Questions to ponder:
- Do you feel your duty plays a part in the design of artifacts and services in public spaces?
- Would you like design for social concerns?
- Would you like to pursue Social Design as a profession?

Self Assessment:

Assessment Criteria (Task 4.1a + 4.1b + 4.1c + 4.1d + 4.2a + 4.2b + 4.2c) – Assess yourself:

- The Identification of Problem for the Public Space + the Mindmap was done well. (Individual Assessment, Task 4.1a)

☐ *Beginning*   ☐ *Developing*   ☐ *Promising*   ☐ *Proficient*   ☐ *Excellent*

- The Primary and secondary research was done well. (Group + Individual Assessment, Task 4.1b + 4.1c)

☐ *Beginning*   ☐ *Developing*   ☐ *Promising*   ☐ *Proficient*   ☐ *Excellent*

- The analysis of the public problem space was well conceived. (Group + Individual Assessment, Task 4.1d)

☐ *Beginning*   ☐ *Promising*   ☐ *Excellent*

- The ideation for this project had many alternate concepts. (Group + Individual Assessment, Task 4.2a)

☐ *Beginning*   ☐ *Promising*   ☐ *Excellent*

- The soft (low-fidelity) prototyping was done very well. (Group + Individual Assessment, Task 4.2b)

☐ *Beginning*   ☐ *Developing*   ☐ *Promising*   ☐ *Proficient*   ☐ *Excellent*

- The presentation of this project explaining the design process as well as the final solution was done well. (Group + Individual Assessment, Task 4.2c)

☐ *Beginning*   ☐ *Promising*   ☐ *Excellent*

Other References:

O`ther suggested References:
1. Design Thinking Process - explained with an example:
https://www.youtube.com/watch?v=uRtAzzitBmA

2. Design Thinking Framework - a short video:
https://www.youtube.com/watch?v=LhQWrHQwYTk

5.0 Module 5
Capstone Design Project:

80 hours (52 in school and 28 at home)

Overall Task	**Identify a Design Problem to solve**
Task 5.1 (at School + Home)	**- Stage 1:** Understanding the problem to be solved – Primary and Secondary Research + Analysis of the problem
Task 5.2 (at School + Home)	**- Stage 2:** Ideating, sketching and alternatives + Soft Prototyping
Task 5.3 (at School + Home)	**- Stage 3:** Prototyping and getting feedback
Task 5.4 (at School + Home)	**- Stage 4:** - Final Presentation + Documentation
Task 5.5 (at School)	- Business Model
Task 5.6 (at School + Home)	- Final Design Solution Presentation and Documentation
	+ Reflections, Self Assessment and References