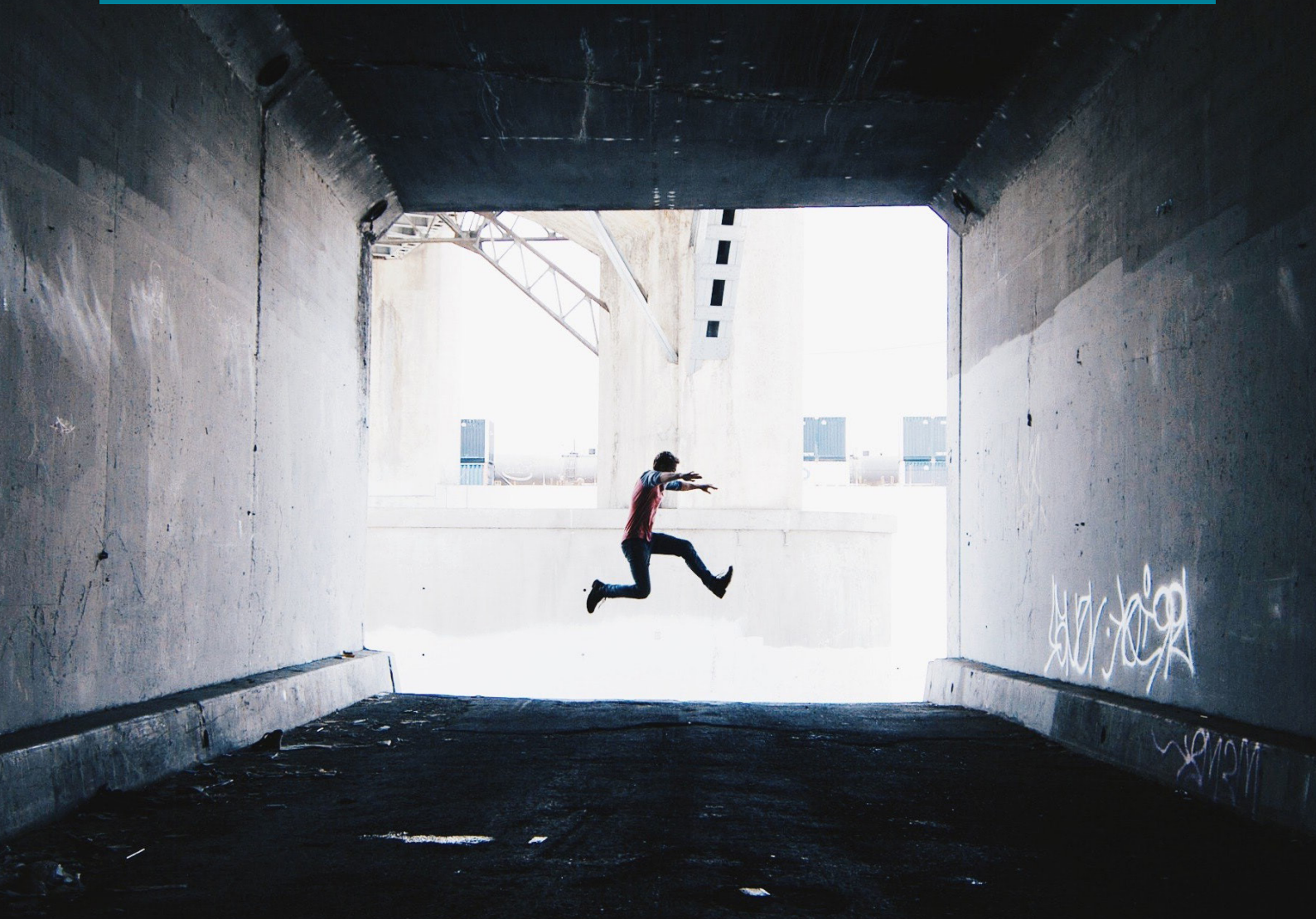


Perspectives on Daylight

Workshop handout

ETH Sustainability
Winter School 2019



Dear participants,

During the next days, you and 29 other students are going to work together in teams of six on the challenges around daylight aspects in relation to the environment, health, architecture and technology. You will develop solutions and present them on Friday as prototypes incorporated in a city.

Your prototype city should emerge out of an integration of your personal experiences, the knowledge acquired through the lectures, your groups' collective knowledge, and the research you will conduct during this week. Each day you will be given a different task that will contribute to the final result.

On Friday, you will present your "Sustainable Daylight City".

Learning Objectives:

- Gaining experience in transforming theoretical input into practical action
- Personal and group reflection on daylight challenges (interpretation of newly acquired knowledge)
- Analysis in order to bring what has been learnt into a tangible context (conceptualize, how would we implement the theoretical concepts)
- Testing solutions (what do we prioritize, what choice do we make, define consequences)

This Winter School is organized by
ETH Zurich in collaboration with the
Daylight Academy:

ETH zürich

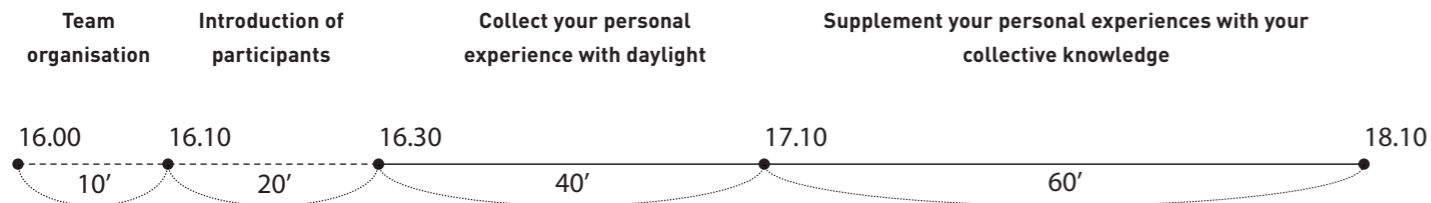
DLA
DAYLIGHT
ACADEMY

Monday

Define challenges

Task: Develop your team's understanding of daylight based on your personal experiences, inspiration by the lectures and the collective knowledge of the team. Afterwards, you will derive 5 to 10 challenges you want to work on during the week.

Objectives: You will get insight into the knowledge that exists in your team. You will learn about your team member's different experiences and lifestyles. As a team, you will create a common image of the use and influence of daylight regarding the environment, human health, architecture, and technology.



Team organisation 10'

Teamwork

Appoint a team leader
This person is responsible for the following tasks: to navigate through the day, i.e. keeping the goals of the day in mind, facilitating discussions ensuring that everyone is involved. The person is responsible that your team makes joint decisions and achieves the goals of the day.

Define a timekeeper
to stick to the time schedule.

Determine a note taker
to record all important points and processes in writing - 1 A4 page per day.

These positions should be determined anew every day. Make sure that everyone has held at least one position until the end of the week. Hand in the daily note pages to the organizers every evening after dinner.

Introduction of participants 20'

Teams of two, teamwork

Split into pairs of two. Ask your partner questions (5' each partner). Then introduce each other to the group.

Where do you come from?
Field of study?
What characterizes you?
Why did you apply for the winter school?

Collect your personal experiences with daylight 40'

Individual work, teamwork
Materials: post-its, flip chart, magic walls

Write down your personal experiences with daylight on post-its (individually, approx. 10 min)

Think about (examples):

- How does daylight influence your everyday life?
- How do you experience daylight at work or during your studies?
- What fascinates you about daylight and where do you consciously perceive it?
- Do you know places (streets, parks, countries, etc.), buildings, or objects where daylight plays a special role?
- How do you deal with challenges related to daylight?

Think of:

- Times of day and different seasons
- Different environments in which you move
- Activities (leisure, university, weekends, work, sport/ hobbies, holidays)
- Your well-being; what feelings are triggered by daylight in what situations?
- How architecture or light technology modify the experience of daylight

Gather your experiences, explain your post-its to the team and collect them on a flip chart (approx. 30 min.)

Mention your living conditions and personal experiences so that the group gets a holistic image.

Think of:

- Climate conditions (difference in temperature and light conditions summer/winter)
- Cultural, economic or individual aspects that influence your experience of daylight

Supplement your personal experiences with your collective knowledge 60'

Teamwork
Materials: post-its, flip chart, magic walls

Cluster your personal experiences (approx. 15 min) and group the post-its according to:

- a) Challenges
- b) Strategies / implementation / solutions (from personal experience)
- c) Other

Open the scope and complete the challenges from your personal experiences with any additional inputs, e.g. from your research or study background (approx. 20 min).

Structure your results around the most important or overarching challenges (approx. 10 min).

Specify your 5-10 most important challenges (approx. 15 min) and write them down on a poster/flip chart.

IMPORTANT: Focus on challenges and leave the solutions/strategies aside (for now)!

Outcome

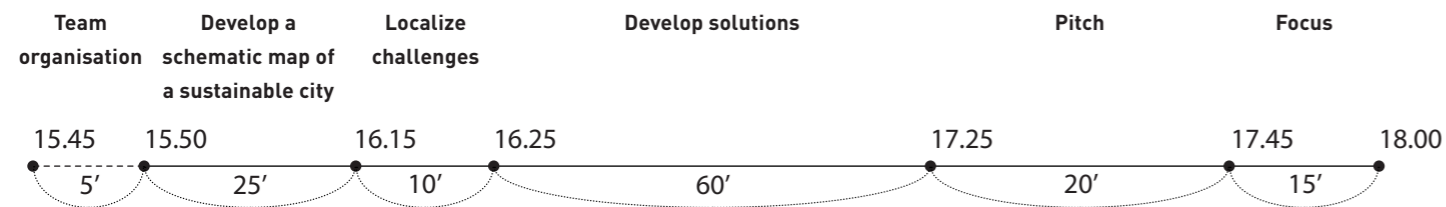
You will have created a poster that contains a collection of your personal experiences as well as 5-10 overarching or most important challenges. At this stage, the focus lies on the challenges. In addition, you have summarized your team results on an A4 page.

Tuesday

Localize your challenges in a city and generate solutions

Task: Create an image of a city, localize daylight challenges within it and develop sustainable solutions. Choose a team member who will describe in detail either their home or university city. Use this information as input to conceive a fictional city. Draw a schematic map and give the city a fictional name. In a next step, you shall localize the challenges you have defined on Monday within this city and mark them on your schematic map. Finally, develop different sustainable solutions.

Objectives: You will get to know the specific living conditions of a fellow team member and reflect upon the role daylight plays for a sustainable society. You will learn to draw general conclusions and designing a concept for a sustainable city.



Team organisation 5'
Teamwork

Appoint a team leader, a timekeeper and a note taker

These positions should be determined anew every day. Make sure that everyone has held at least one position until the end of the week.

Develop a schematic map of a sustainable city 25'
Teamwork, discussion
Materials: post-its, brown paper

Interview a person from your team about the city they come from

- Together you decide on a person from your group to describe a city in detail.
- The rest of the team should ask as many questions as possible to gain a comprehensive understanding of this city.
- Two people draw or write the different aspects on post-its.

Draw the city schematically

- Now draw a schematic map of the city including the information you have gathered on post-its.
- Add city districts or special places that seem important in the context of your challenges. They may or may not exist in the actual city.

Give the city a fictional name

Compile the essential aspects of the city and think of its characteristics

- Possible questions:
- Where is the city?
 - How big is the city?
 - Which urban areas exist (old town, industry, parks, main streets...)?
 - How are the public and private spaces approximately distributed (living, working, leisure, mobility)?
 - How densely built are which districts of the city?
 - What are the special features of the city (e.g. individual buildings, objects)?
 - What are the climatic conditions (seasons, temperature fluctuations, daily hours of sunshine)?

If something is not known, assumptions can be made.

Localize challenges 10'
Teamwork
Materials: post-its, brown paper

Locate and mark the challenges you have identified on Monday on the map of in your city.

Develop solutions 60'
Teams of two, brainstorming and research
Materials: post-its, posters, one laptop per team

Distribute the challenges to teams of two. Brainstorm for solutions in the teams.

Be creative! Develop new ideas, go beyond what already exists and collect as many solutions as possible.

The more the better! Think of many different approaches

- Let yesterday's thoughts flow into the city
- Consider that depending on age, state of health and living conditions, other aspects around daylight are crucial.
- Summarize what you've learned so far from the lectures, your collective knowledge, and research work
- The solutions should cover the three dimensions of sustainability (environmental, social and economic).
- Think of technical, political and social solutions.

Pitch 20'
Teamwork

Share your solutions with the team

Discuss, give and record feedback

Give feedback in a supportive way:
"What I really love about..."
"What I would like to see more..."

Focus 15'
Teamwork, discussion

Select the approx. 5-10 most promising solutions that you would like to look at in depth on Thursday.

It is up to you whether to focus on a few solutions in depth or on more.

Outcome

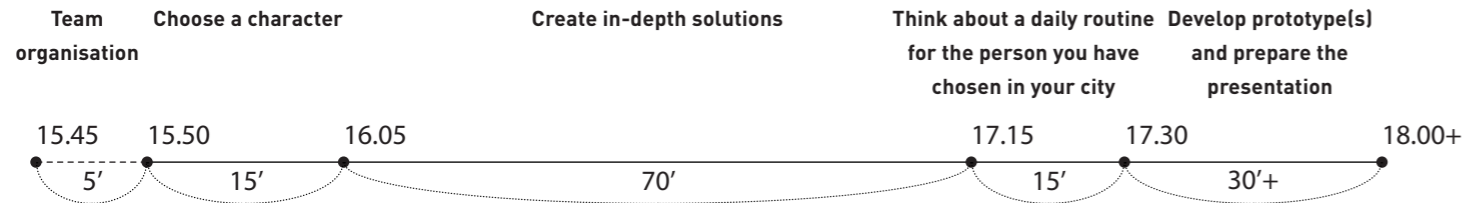
You will have created a schematic map of a city for which size, geographical location, social structure and all daylight relevant features are known. Also known are the challenges that arise in the context of daylight in this city, as well as 5-10 corresponding solutions. The challenges as well as the solutions are localized on the schematic plan. Your approach and your team progress are summarized on an A4 page for the short report.

Thursday

Prototyping und storytelling

Task: You will chose a character from a pre-defined list. The task then is to develop specific solutions for the “daylight problems” this person would encounter during a typical day in a city. Illustrate these solutions as prototypes in your city model. Additionally, prepare your presentation for Friday.

Objective: You will learn to combine the knowledge gained through the lectures with the insight attained in the group work in order to use it for the development of the prototypes. One of the goals is for you to learn how to communicate your ideas by telling a personal story.



Team organisation 5'
Teamwork
Appoint a team leader, a timekeeper and a note taker.

These positions should be determined anew every day. Make sure that everyone has held at least one position until the end of the week.

Choose a character 15'
Teamwork, discussion
Materials: post-its, poster
Choose a character from the pre-defined list.
- Try to identify as many situations/contexts as possible in which this person is exposed to daylight or the lack thereof. For this, you may make use of your previously defined challenges and solutions.

- Depending on age, state of health and living conditions of your character, other aspects around daylight are in focus.
- Combine what you've learned so far from the lectures, your collective knowledge and research work.
- The solutions should be as sustainable as possible (environmental, social and economic).
- Think of technical, political and social aspects and solutions.

Create in-depth solutions Give it some substance! 70'
Teams of two
Specify your sustainable solutions in more detail in teams of two. Do some additional research.

Think about a daily routine for the person you have chosen in your city 15'
Teamwork
- Think about a daily routine for your character which lets them benefit as much as possible from your solutions.

Develop prototype(s) and prepare the presentation 30'
Teamwork, discussion, presentation
Materials: various handicraft materials are available, e.g. paper, pencils, cardboard, modelling clay, fabric
- Build your solutions as prototypes in the city (buildings, objects, environment).
- If you do not have a model of a solution, indicate the location in your city map where the solution would be implemented.
- Please continue the work on your prototype after dinner.

- You choose the materials and form of representation yourself.
- You can make the prototype out of the provided materials or shoot a video, for example.
- See key data for presentation on next page.
- Practicing in the evening is recommended!

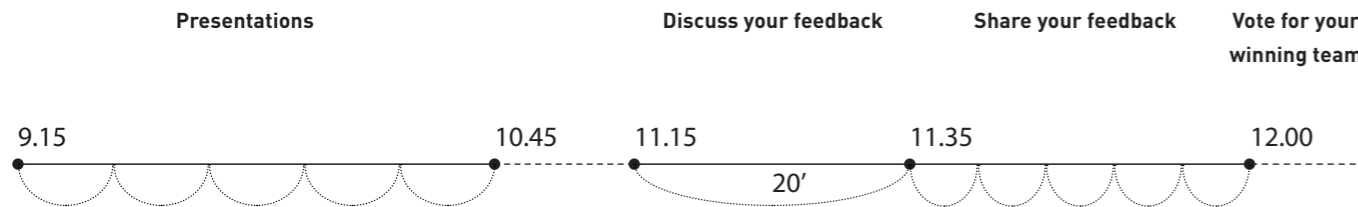
Outcome
You will have completed your prototype and designed the story of a character living in a sustainable city where daylight plays a central role in the daily routine. Your approach and development steps are written down on an A4 page and you will have finalized a short report of the week. Please hand it in after dinner.

Friday

Presentation and feedback

Today you will present the story of your "Sustainable Daylight City" and train your feedback competences.

Good luck and have fun!



Present the story of your Sustainable Daylight City 10'+5'

You will have 10 minutes per team to tell the story of your Sustainable Daylight City and 5 minutes to answer questions from the audience.

It is up to you how to design the presentation but please include your whole team. You may also choose any material to support your presentation, except (!) power point.

The story of your Sustainable Daylight City should include the following aspects:

- present your city, its location, size, specification and all daylight relevant information and data.
- explain your selected challenges and corresponding solutions (approx. 5 -10).
- describe your selected character, explain the challenges s/he meets during his/her daily routine, and present possible solutions to overcome the challenges.

Take notes during the presentations

During the group presentations of the other teams, everyone of your team listens actively and takes individual notes on post-its.

- These notes should include:
- "What I really love about..."
 - "What I would like to see more..."

Discuss your feedback 20'

After all presentations, you will discuss your individual feedback with your team members. Please condense your accumulated feedback and choose a speaker to share your group's thoughts on the other four group presentations.

Thoughts that might be relevant for the feedback:

- Did you gain a comprehensive impression of the Sustainable Daylight City?
- How clear and convincing are the selected challenges and suggested solutions?
- What did you like about the story of the selected character and their daily routine?
- Are the results well researched and well justified?

Share your feedback 25'

Each team has 5 minutes to give their feedback to the other 4 groups.

Think of your feedback as a gift for all other teams. Therefore, we ask you to consider the golden rules of feedback:

- 1) Feedback should enable others to learn and grow.
- 2) Feedback should be short, clear and precise.
- 3) Feedback should be objective (referring to results, concrete actions, etc.)

Contact

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