Think it,
Sketch it,
Show it!

Toolkit for
co-design with
young people
This report
This toolkit has been made by GXR within the framework of Desire (New European Bauhaus) in December 2023.

The toolkit is based on a 3 week co-design workshop organised by Danish housing association Domea.dk with forty 8th grade students from the Ole Rømer School in Gadehavegård. The aim of the workshop was to engage young people in the redevelopment of the Gadehavegård neighbourhood. Within these activities, GXR was invited by AGORA to develop and run design workshops with the students.

The following document offers a toolkit to facilitate and adapt similar co-design workshops in different scenarios. The intention is to provide an easy to use resource for the implementation of engaging co-design activities with young people.

Desire experiments with creating sustainable, attractive, and inclusive urban spaces which respect the limited resources of the planet, with the recycling of materials, and in interaction with citizens, artists, architects, designers, urban planners, contractors, builders, knowledge institutions, and other organisations.
Table of Contents

Introduction
Goals & Ambitions
Expected outcomes

Design with young people
Know the game
Give ownership
Ask the right questions
Talk & discuss
Provide a variety of tools

Toolkit
Design process and methods
0. Research
1. Inspiration
2. Ideation
3. Prototyping
4. Iteration
5. Feedback
Analysis

Case study
The challenge
The two week programme
The 40 students
Participatory research and design process
GXN office production
Final exhibition
Outputs & learnings

Key tools examples
INTRODUCTION
Goals & Ambitions
Why involve young people

Young generations bring a mix of new perspectives, unconstrained imagination, and willingness to embrace experimentation to tasks of urban design.

Although it is difficult to summarise the many benefits of engaging with young people, the following three goals and benefits are fundamental for inviting young people into co-design processes:

To include young people in urban development
Involving young individuals in design workshops provides an opportunity to share and discuss local challenges while listening to their point of view and perspectives. Done right, this offers an opportunity to learn about emerging values, ideas, and topics and to challenge established beliefs. It serves as a great opportunity for learning in both directions.

To share resources and opportunities
Inclusion and open access to learning resources should foster more equal relations between the participants, improving learning for all. Young people lack some of the ingrained understandings that often confine adults to predictable, safe answers to design problems. This allows them to think more creatively and question conventional ideas - challenging design and fostering new ways of thinking about a challenge.

To transform urban space, together
Young individuals constitute the target group that uses public spaces as fundamental places for growth, socialization, identity, and interaction. This makes them capable of providing valuable insights into the challenges and opportunities of a specific site.
What young people can expect from the process:

Express ideas
Design is a powerful tool for expressing ideas and effectively communicate necessary changes. Participants will be provided with the tools to articulate concepts and give shape to their ideas.

Learn through design processes
Participants will use tools and processes common to design and explore different ways of expressing their ideas (from sketching to AI-generated images). This will make the sessions more interactive and varied, while stimulating different types of competences in the students.

Confrontation with multiple viewpoints
By engaging in activities facilitated by external professionals – and by working together to develop and critique ideas – young people have the opportunity to be exposed to different thoughts, activities, creative approaches and team work. This provides a safe venue to apply consider how the skills and knowledge they learn in school can influence real life problems.

Explore a profession
Participants will learn what it means to be a designer/architect and what the daily design process can look like. They will build an understanding of what a creative profession is, using hands-on tools and processes from design, and will have the opportunity to talk to people in the industry.

Expected outcomes
Why involve young people

Within co-design processes, young people have a space to express their needs, explore their ideas and have them translated into engaging design projects and visuals.
Involving young people in a design workshop is a strategic approach to building valuable insights and design principles that can contribute to the creation of future-proof solutions.

What organiser(s) can expect:

High quality engagement activity
The process outlined in this document will serve as an important moment to engage and involve local groups in a urban development process. The proposed activities go beyond traditional workshop formats by encouraging idea generation, teamwork and realistic design proposals.

Guidelines for design targeting young people
By involving young individuals in design processes, teams will gather first-hand insights into the factors that contribute to a design being appealing, functional, and user-friendly for this target demographic. These inputs can lead to design guidelines that can inform final design decisions with considerations such as usability, accessibility, program, and aesthetics.

Catalogue of ideas
The workshop will develop rich catalogue of design proposals that, in addition to offering robust design principles, can serve as a valuable resource for designers and professionals, providing a repository of diverse ideas that can inspire the final project. It will also be an indelible document of the ambitions and hopes of a young generation.
DESIGN WITH YOUNG PEOPLE
The key to a successful co-design process is to enable participants to contribute with what they are experts in, namely their own perspectives and ideas, while helping them refine these into design proposals in a structured way.

Language and communication
Avoid abstract concepts and expert jargon in your interactions with the participants. Rather than asking participants what they think of ‘biodiversity’, ask them to describe recent experiences in nature, or green areas that they like, they will respond with fresh air, colourful flowers and picking berries with the family to make jam at home. As a facilitator your responsibility is to shift the focus from the abstract to the relatable, to the everyday, to the activation of the senses and to the pleasurable experiences that benefit the body, the mind, and the sense of belonging to a culture or a community. Making terms digestible is an important task in reducing the communication gap between participants and facilitators.

Importance of movement and interaction
When designing activities, it is important to bear in mind that it can be difficult to engaged and creative for more than 15-20 minutes at a time, especially during presentations and group work. For this reason, it is recommended to work with a programme of short sessions of maximum 20 minutes. Alternating conceptual activities (thinking, reflecting, listening) with physical activities (moving, building, walking) is helpful for running workshop sessions that last longer than 2 hours.

TRUST THE PROCESS
The toolkit is designed to move you through several predefined stages, focusing specifically on the intended outcomes of each stage: local stories and perspective in the exploration stage; patterns and principles in the analysis stage; design solutions based on principles in the synthesis stage; and testing of ideas with relevant users in the test stage.

Keeping the activities concrete and relatable is fundamental to establishing a healthy engagement process, focus on the stories and ideas presented by the participants in the exploration stage, while leaving abstract analysis to the experts, resulting design principles can be refined and used to synthesise ideas with participants in the synthesis and testing stages.
Ask the right questions

Ask questions participants know how to answer, avoid specialist jargon

If you ask participants: “What do you think about urban resilience?” or “Design a park that is circular and sustainable”, you should not expect brilliant results. Most people don’t have specific knowledge about circularity, resilience, etc., and they may feel stuck in front of questions they don’t know the answers to. Instead, ask them “What do you like to do in your spare time?” “What would you like to do but can’t today?” Asking personal questions to which participants know the answers establish them as the experts and is a great way to start talking about needs, wants and ambitions.

Provide a variety of tools

Developing ideas is something everyone can do provided the right techniques and guidance

Design is not simply about drawings and sketches, given a blank canvas few untrained people can visualise ideas right off the bat. Providing a variety of tools helps the creative process from different perspectives and makes the process inclusive for those who prefer to build things with their hands rather than draw (for example). Offering tools that are hands-on, reflective, descriptive, imaginative, and suggestive. The more you can add, the easier it will be to generate projects that are borne from fun and true to the participants’ goals.
Give ownership

Young people have an open approach to creativity and ideation. Let them drive the designs, ensure that they have fun.

A sense of ownership increases engagement, commitment, and creativity. Facilitators should not act as if they know what the final designs should be or look like, but rather as “advisors” to whom the participants can turn for tips, suggestions, and help with specific challenges. Make it clear from the beginning that the participants are not only the experts but also in control of their own design choices and the final result.

Talk and Discuss

Take time to talk to participants about what is important in their world, explore what they care about and what they think is needed.

Take the time to listen and use the design process to facilitate dialogue. Take participants’ ideas seriously and help them to realise their design ambitions using the various tools proposed in this toolkit or others. Make participants aware of why they are the right people to contribute to the design challenge. Gather feedback and feelings about how the activity is going, and be open to questions and adaptation of the process.
WORKSHOP PROCESS AND TOOLS
Think it, sketch it, show it!
A 6-steps co-design process

By demystifying tools and processes commonly used by designers, the toolkit takes young people through the creation of a project from conception to final designs.

Our co-design process and tools simulates the steps that would normally take place in an architectural/design office during a project. Participants start with no knowledge and finish with a complete design project ready to present.

This methodology allows everyone to ideate, develop, and visualise ideas in a fun and credible way.

This approach is particularly effective when seeking to transcend conventional workshop methods that rely on less engaged methods and feedback sessions. It becomes a tool to meet genuine ambitions of empowering various users group with design impact around a specific challenge and area.

This method has a number of benefits for both the participants and the organiser. While participants are given the opportunity to explore a profession, express ideas and see them realistically visualised, the organiser gathers valuable insights, design principles, and emerging needs unique to the site, all expressed in a catalogue of bespoke design ideas.
What do you need

The process extends beyond a single day of engagement and requires specific tools and materials.

### Time

Due to the nature of this process, you will need a generous amount of time. We suggest a range of 2-5 days for the on-site workshops + an additional 3-10 days for visual production. Visual production time depends on number of participants, but expect to spend 3-5 hours per project, depending on the quality you want to achieve.

### Space

Depending on the number of participants, a flexible space is suggested where people can move around, rearrange materials and work in a variety of settings, e.g. plenary presentations, team work, large group discussion, pin-ups.

### Tools & materials

Papers, pencils, markers, projector, tables, scissors, post-its and a variety of specific tools that are in these pages.

Who do you need

The workshop brings together participants, facilitators, teachers and a design team of professionals.

### Participants

The format of the workshop has been specifically designed and tested with students (12-17 years old). Despite this, we believe that it can be applied to a wider age range with only minor adaptations. We suggest a proportion of 1-3 facilitators for every 10 students depending on age and abilities.

### Facilitators and design team

Facilitators and a design team are a key presence in workshops. They organise and run the activities, while the design team is responsible for supporting the development of participant ideas, translating them into professional looking projects. Facilitators and the design team might overlap or be different depending on the number of participants** and the project’s budget.

### Teachers

When working with students, teachers are an invaluable resource. Teachers can help refining design challenges and tasks, making them relevant and approachable. Teachers can also help linking design work to topics that have previously been covered in school, thereby facilitating additional learning processes.
Before starting

Frame your design challenge

Be specific with your intentions by understanding what are you designing for. Summarise your design challenge in one simple sentence, for example: "Design a green plaza for your friends and family".

Prepare detailed scripts

Different ages and groups have different attention spans. When designing activities for teenagers or younger, prepare bullet-point scripts based on 15-20 minute sessions, alternating moments of reflection with moments of movement and hands-on activities. This will help to keep attention and engagement high.

Know the background

A general understanding of the participants’ backgrounds, the area and its historical development is prerequisite. Getting to know previous proposals and the overall vision for the area your designs will engage in will help both the facilitation of the workshops and the correct framing of the design challenge. Teachers can play a key role in this.
The workshop process
Think it, sketch it, show it!

The design workshop is composed of 6 connected steps + 3 visual production sessions for the design team. Following these steps guarantee a good result and a fun experience for the participants.

- **What:** a 6 steps design workshop
- **Why:** involving young people in co-design process of an area they know well
- **Who:** teenagers, teachers, facilitators, design team
- **Where:** schools, municipalities, community based organisations
- **When:** early stages development process, pre-design phase, brief development

00 **Research**
- Conduct on site research, gather insights, increase understanding of the area

01 **Inspiration**
- Developing the right mindset for participants, create teams and logos

02 **Ideation**
- Concept development through references, sketches, descriptions, discussion

03 **Prototyping**
- Use physical modelling, sketching and material palette selection to detail and define ideas

04 **Iteration**
- Final iteration on designs with participants along with material selection suggestions

05 **Feedback**
- Final exhibition with presentations and feedback session
# Research

Do this in order to build a tacit knowledge of your area and explicate challenges and opportunities, allowing you to look at the design challenge with fresh eyes. Students are divided into groups of 2-3 before starting the session and provided with tools that allow them to conduct their own research into the context.

## TIME
One full day or multiple days in shorter sessions

## MATERIALS
Information materials and tools to facilitate fieldwork

### STEPS | TIME
---|---
1. **Defining research tasks**<br> Spend time explaining the tools of participatory research with a focus on aims (why it is needed, what kind of knowledge do we get out of it) and practice (how to do this). Assign specific tasks to students.<br> *Front of class* | 20 min

2. **Conduct the research**<br> Divide participants into groups to start the fieldwork and conduct research with friends and family e.g. data collection through photos, notes, interviews with locals.<br> *Divided in groups* | 60 min +

3. **Gathering results**<br> Each group gathers the results and reorganises them to fit pre-existing templates. If possible, create a moment where each group shares their results with the others.<br> *Divided in groups* | 30 min

---

NB. Breaks are suggested every 45 minutes

---

**AFTER ENDING THE SESSION**<br> Make sure to collect all the findings group by group in an organised format.

---

**KEY TOOLS**

- DATA COLLECTOR (APP, TEMPLATE)
- INFORMATIVE MATERIALS & MAPPING LIST
- INTERVIEW SCRIPTS FOR QUALITATIVE RESEARCH

---

Key tools are described on pages 48-51
Introduction of the co-design process and expected outcomes. ‘Setting up’ a design firm will help make the students conscious of why they are the right ones to solve this design challenge. Students are preferably divided in group of 2-3 before starting the session, ask teachers for help defining good teams.

**TIME**
1.5 h +

**MATERIALS**
pens, papers, logo templates, presentation

**STEPS**

1. **Create teams, names and logos**
   Each team (2-4 students) has to set up their design firm with a name and sketch a logo. This will accompany them during the all design process. Keep this short.
   
   Divided in design teams
   
   
   TIME
   20 min

2. **Presentation of programme and design challenge**
   Facilitators present themselves, their role and the overall goal of the workshop, then present the design challenge. Be clear, sincere and transparent.
   
   Front of class
   
   
   TIME
   20-30 min

3. **Introduction to design process**
   Present “what architects do during a work day”. Insights from everyday work. Insist on the process - it is about trying, failing, iterating, and experimenting. Ask for questions, reply and consider adaptations.
   
   Front class
   
   
   TIME
   20-30 min

**NB. Breaks are suggested every 45 minutes**

**KEY TOOLS**

LOGO TEMPLATE

PRESENTATION

ADD YOUR OWN

ADD YOUR OWN

BEFORE ENDING THE SESSION
Make sure every design team have a logo and a name drafted on their logo template.

Key tools are described on pages 48-51
After a moment dedicated to team discussion and reflection, participants define what they want to work on and start to develop ideas for their projects. In this session they will establish project objectives, begin to develop concepts, and define a design direction.

**STEPS**

1. **Questions**
   - E.g. “What do you like to do after school? What would you like to do that you cannot do today?” Allow participants 10 minutes of reflection to answer.
   - **TIME:** 10 min

2. **Discussion and categorisation**
   - Students discuss their answers in groups of 2-6 and cluster them into topics with facilitators. At the end of the session all groups come together and place their ideas on the ground to create a shared resource.
   - **TIME:** 20 min
   - Larger groups of 2-3 participants

3. **Categories creation (only facilitators)**
   - Facilitators refine the categories and cluster them into meaningful groups. A final range of 4-6 categories is expected (e.g. chill out zone, sport activities, nature).
   - **TIME:** 15-20 min
   - All facilitators

4. **Category selection and concept template**
   - Each team has 5 minutes to discuss and select a category they would like to work with. Keep this short. Each group starts to work on ideas and at the end need to fill out the concept template handed out now by facilitators.
   - **TIME:** 60-90 min
   - Divided in design teams

**NB. Breaks are suggested every 45 minutes**

**TIME**

- 2 h +

**MATERIALS**

- pen, post-its, paper, reference images

**KEY TOOLS**

**DESIGN CHALLENGE AND QUESTIONS**

**FACILITATOR HELP PROMPTS**

**REFERENCE IMAGES**

**CONCEPT TEMPLATE**

**BEFORE ENDING THE SESSION**

- Make sure you collect every concept template and that every of them is filled out with necessary information by the teams.

Key tools are described on pages 48-51
The prototyping session is the moment where ideas and concepts are transformed into real designs proposals with expert help and guidance. Different tools (defined by design stations) are used for the development and detailing of each concept.

**Prototyping**

**STEPS**

1. **Concept definition**
   - Teams have time to redefine and detail their concept descriptions from the earlier Ideation session. Focus is on sharpening ideas and developing engaging concepts.
   - Divided in design teams

2. **Design stations - prototyping**
   - Teams move from design station to design station to develop their ideas with a variety of tools. Plan for sessions of 25-35 minutes for each station - the stations themselves can vary, we have selected a number here for inspiration.
   - 2-3 design teams per stations

3. **Wrap-up**
   - Teams group all their artefacts produced in the stations together with their concept template. Participants should be encouraged check out each others work.
   - Divided in design teams

**TIME**

- 20 min
- 120-150 min
- 20 min

**MATERIALS**

pen, post-its, paper, pc, tools, and experts to run the design stations

**KEY TOOLS**

- **SKETCHING**
- **AI STATION**
- **PHYSICAL MODEL**
- **MATERIAL PALETTE**

**BEFORE ENDING THE SESSION**

Collect concept templates and everything produced at the design stations. Record all work with photos and notes (essential for the design team that will produce the visualisations).

Key tools are described on pages 48-51
# Iteration

Iteration session is when participants see their projects transformed into realistic visuals produced by the design team and have the chance to comment, iterate the design and define the material strategy and the strongest narratives.

<table>
<thead>
<tr>
<th>STEPS</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Present the results</strong>&lt;br&gt;Facilitators and design teams present sneak peaks of what has been produced. Seeing projects transformed into 3D models should provide a moment of excitement.&lt;br&gt;Front of class</td>
<td>10 min</td>
</tr>
<tr>
<td><strong>2 Feedback 1: Design</strong>&lt;br&gt;Distribute printed preliminary visuals from 3D models to each team. Teams can comment, correct, sketch over and provide feedback directly on the printouts.&lt;br&gt;Divided in design teams</td>
<td>20-30 min</td>
</tr>
<tr>
<td><strong>3 Feedback 2: Materials &amp; circular opportunities</strong>&lt;br&gt;On a second set of 3D model visuals, teams can comment and apply materials using their “material palette” from the prototyping session. Facilitators can use this to discuss with circular design opportunities.&lt;br&gt;Divided in design teams</td>
<td>20-30 min</td>
</tr>
</tbody>
</table>

NB. Breaks are suggested every 45 minutes

**KEY TOOLS**

- 3D MODELS
- MATERIAL CATALOGUE
- MATERIAL/PROJECT REFERENCES

**BEFORE ENDING THE SESSION**

Collect all visuals with student notes, feedback, and material selections

Key tools are described on pages 48-51
Feedback

The feedback session is designed to give recognise the work done by participants while giving them serious feedback on their final designs and presentations. We suggest that this session takes the form of an exhibition where external guests are invited and each team practises a small presentation beforehand.

<table>
<thead>
<tr>
<th>STEPS</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exhibition set-up</td>
<td>30-45 min</td>
</tr>
<tr>
<td>Each team collects their final design materials (both received from facilitators and produced) and set up their exhibition spot. We suggest to use same format for each team.</td>
<td></td>
</tr>
<tr>
<td>Divided in design teams</td>
<td></td>
</tr>
<tr>
<td>Pitch preparation sessions</td>
<td>60 min</td>
</tr>
<tr>
<td>Each team prepare its pitch following “pitch guidelines”. First by themselves and then they can have try repeat with facilitators</td>
<td></td>
</tr>
<tr>
<td>Divided in design teams</td>
<td></td>
</tr>
<tr>
<td>Exhibition</td>
<td>90 min +</td>
</tr>
<tr>
<td>Project presentations are given by participant teams to external guests (key stakeholders in the area). If possible reserve time for discussion and final feedbacks for the all design team together for recognition of great work. Visiting each exhibition spot, and in front of class</td>
<td></td>
</tr>
</tbody>
</table>

NB. Breaks are suggested every 60 min minimum

Key tools are described on pages 48-51
Visual production by the design team is dedicated to transform participants designs into realistic 3D models and visualisations. This process is led by the design team and happens in between workshop sessions as specified on pages 32-33.

**PRODUCED OUTSIDE WORKSHOP SESSIONS**

<table>
<thead>
<tr>
<th>Task Description</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teams names and logos</td>
<td>15 min per group*</td>
</tr>
<tr>
<td>Creation of digital logos and names for each design team. Print these on rigid plates and/or personalised business cards for teams to carry with them.</td>
<td></td>
</tr>
<tr>
<td>Between inspiration and ideation</td>
<td></td>
</tr>
<tr>
<td>2. 3D and set of visuals</td>
<td>3 h   per group</td>
</tr>
<tr>
<td>Develop 3D models for every project and select the views and renderings that best represent ideas and concepts.</td>
<td></td>
</tr>
<tr>
<td>Between prototyping and iteration</td>
<td></td>
</tr>
<tr>
<td>3. Visuals iteration + panel design</td>
<td>1-2 h  per group*</td>
</tr>
<tr>
<td>Refine 3D models according to feedback form the iteration session and apply materials textures. Create a poster for each project with key info and visuals to be printed and presented during the exhibition.</td>
<td></td>
</tr>
<tr>
<td>Between iteration and feedback</td>
<td></td>
</tr>
</tbody>
</table>

NB Time does not include printing and depends on software used and desired level of detail.

**KEY TOOLS**

Key tools are described on pages 48-51.
Summary of key tools

Tools can be adapted and redefined according to specific needs and situations. Below is a list of select tools that can be applied or used as inspiration.

**DATA COLLECTION TOOL**

This can be a physical template or a digital tool such as the “Our Walk app” (see pag 62), where participants can collect images, notes, interviews and information gathered during their field work.

**LOGO TEMPLATE**

A 20 x 20 cm rigid plate for participant team logos and names. The plate will accompany them throughout the process if the logo is digitalised and printed.

**PRESENTATION**

Presentations that describe the design process at hand in a memorable, engaging way, e.g. “a day in the life of an architect”, “the story of designing a house”, “imagine, design, build”.

**DESIGN CHALLENGE AND QUESTIONS**

Design challenges and key questions relevant for each to help drive the ideation session. These should be focused on what the participants know well and easy to answer with depth and tangible examples e.g. “What do you like to do after school?”

**FACILITATOR SCRIPTS AND PROMPTS**

Notes that facilitators can use to facilitate discussions and reflections among teams. These are usually connected to the key questions for the participants e.g. “Where do you like to do that activity?” “Is there something that can make this even better?”

**GUIDING QUESTIONS FOR INTERVIEWS**

A set of questions or a fully fledged interview guide can help participants facilitate interviews with stakeholders and locals. Can be based on ethnographic interview techniques, Karl Tomms 4 question types, or similar frameworks.

**REFERENCE/INSPIRATIONAL IMAGES**

Set of images and visuals that can inspire ideas and discussion among teams. Select images according to your design challenge and specific context. Be as wide as possible. Images are a strong tool to initiate discussions and ideation.

**INFORMATION MATERIALS AND MAPS**

Information about the area and potential research topics e.g. windflowers, trees, uncomfortable atmospheres, great places!, barriers, unsafe spots. Maps can help divide areas of intervention and tie insights to spatial settings.

**GUIDING QUESTIONS FOR INTERVIEWS**

A set of questions or a fully fledged interview guide can help participants facilitate interviews with stakeholders and locals. Can be based on ethnographic interview techniques, Karl Tomms 4 question types, or similar frameworks.

**CONCEPT TEMPLATE**

Templates to be filled at the end of the Ideation session help structure output. They serve to clarify expectations to groups and to sharpen generic ideas into engaging concepts. Concept templates can be created on A3 paper with space for e.g. title, aim of the design space for references or early sketches. (See Chapter 4 for examples).

**PROTOTYPING STATION 1: MODEL WORKSHOP**

A place where groups can build physical models using foam, cardboard, wooden stick, lego, cutouts etc. We suggest having one or two people who can facilitate this process. Teams can be provided with a 40x40 cm board on which to build their models. (See Chapter 4 for examples).
Summary of key tools

**3D MODEL VISUALS**
Set of 3D visuals printed with no colour and texture to allow participant teams to comment and draw directly on top of, facilitating iteration of design and application of specific materials and textures. (See Chapter 4 for examples).

**MATERIAL/PROJECTS REFERENCE IMAGES**
Series of images of materials and their application in real life projects can support the choice of materials for participants. References can range from technical to purely aesthetic.

**CIRCULAR MATERIALS CATALOGUE**
A sheet of materials with a focus on circularity and low carbon solutions. Teams can select their preferred options according to their range and define their final materials strategy.

**PITCH GUIDELINES**
Simple guideline that teams can use to build their final pitch and presentation. This can be the structure across key points such as, e.g. "Evocative title" - "What does it bring to the area?" - "Why is it needed?" - "Who is it for?" - "What are the main features?"

**PIN UP EXAMPLE**
Reference images to show how to built an exhibition spot. Teams can use this for inspiration when laying out their part of the exhibition.

**LOGO TEMPLATE**
Digital version of the logo template. This can be a vector file and be prepared on a 20x20 cm digital canvas ready for printing. (See Chapter 4 for examples).

**EXHIBITION PANEL**
Pre-made layout for exhibition panel to be printed. It should contain the main information of the project (title, goal, description, main materials, main features, main visuals, team name). It can vary in sizes, but why not go big: we suggest A1. (See Chapter 4 for examples).

**PROTOTYPING STATION 2: AI IMAGE GENERATION**
Computer with access to an AI image generator (text-to-image). A facilitator should supervise this. All generated images must be carefully collected and analysed by the groups: what do they like, which ideas do they generate, how might they be incorporated? (See Chapter 4 for examples).

**PROTOTYPING STATION 3: HAND SKETCHING**
A place dedicated to hand sketching. This requires a good tabletop, an abundance of paper, pens and drawing implements, colours might also help as can sketch examples and advice from a facilitator. (See Chapter 4 for examples).

**PROTOTYPING STATION 4: MATERIAL SELECTION**
This can be in the form of a A3 template that groups have to fill with select materials they would like to work with for their project. Physical material samples will make this much more hands on, allowing participants to select, group and explore their choices. (See Chapter 4 for examples).
Analysis
Transform perspectives into actionable principles

It is important that the knowledge gained from the co-design process is collected and analysed. Facilitators and design teams are responsible for analysing concrete perspectives and ideas into actionable insights and design principles.

A key value of going through the process is the amount of local, contextual knowledge and insights a design team can generate by engaging thoughtfully with local people. You’ve asked others to invest themselves into the process and must take their input seriously. Their perspective is crucial to informing and positively influencing the design of an area. Even if all ideas cannot be implemented, their underlying principles and needs should inform design. Therefore, it is crucial to analyse and summarise findings throughout the workshops.

Record
The first step for a successful analysis is to record as much as possible during the workshops. Take notes, take pictures of sketches, encourage participants to write down their thoughts and collect these consistently at the end of each session. Building a robust archive will greatly facilitate ongoing review and analysis.

From sketches to principles
The main step of the analysis is to extract design principles not only from the projects presented by the participants, but also from the discussions, notes, and feedback you’ve engaged participants in along the way. Ask yourself: what are the patterns you see? Which needs and principles give rise to these? How could principles drive design?

Inform the final design
Ultimately, the primary goal of any co-design process is to provide valuable insights and design guidelines for the designers tasked with shaping the area discussed during workshops. For this reason, it is important to translate findings into clear points, findings, making these explicit, organised and ready to work with. We suggest that a final report be produced that summarises all findings, and that post-workshop processes for reflecting insights and principles in e.g. tenders and evaluation methods be considered carefully.

It is important that the knowledge gained from the co-design process is collected and analysed. Facilitators and design teams are responsible for analysing concrete perspectives and ideas into actionable insights and design principles.
GADEHAVEGÅRD
CASE STUDY
The challenge

A biodiverse and circular park for Gadehavegård 2030

A 30,000 m² park area will be established in the area of a housing association to function as new recreational park with natural rainwater basins to support local biodiversity.

Gadehavegård: The social housing association Gadehavegård in Høje-Taastrup lies 20 km from Copenhagen. It is one of a number of similar areas in Denmark that is undergoing significant transformation to ensure a special preventive effort according to the Danish Law for Parallel Communities.

Folketinget - the Danish Parliament - has agreed that a number of residential areas must see a significant boost in the coming years to increase average income levels, get more people into work, more people to receive higher education, and fewer people to be convicted of a crime.

The redevelopment: The development plan for Gadehavegård is adapted to the needs of the area and the surrounding city with different types of housing. Some existing blocks will be partially demolished, social housing renovated and new housing for the elderly and private owner-occupied housing will be built.

The park: The proposal involves the removal of the unattractive Østoftegårdsvej and car parks to the north of the housing association, replacing them with a 30,000 m² environmentally friendly park. This transformation should significantly expand the opportunities for outdoor experiences, offering a range of engaging landscapes and promoting life, play, and the presence of wild nature. The park is envisioned as the central green feature in the future Gadehavegård.

The park will be developed during stage 2 and 3 of the project from 2026 to 2029 and represents an opportunity to test and develop urban nature that implements circular design and strategies for biodiversity and future resilience.
The framework

Three weeks of co-design activities

“The programme has been a little different as we were not responsible for facilitating. There has been a lot of learning for us adults. And the student's perspective, I think it has been a programme where they have felt listened to. Not least on the final day, when the mayor came around.”

Camilla Kikkenborg, teacher at the Ole Rømer School

The co-design process, which inspired this toolkit, was implemented in September 2023 with 40 eight grade students from the Ole Rømer School, in Gadehavegård. The activity was organised by the housing association Domea.dk and facilitated by AGORA with GXN within the framework of the EU project Desire - New European Bauhaus.

GXN developed and ran participatory design workshops aimed at involving the students in a meaningful way in the design process. Activities focused on circularity, biodiversity and user involvement, and the young people had to come up with ideas for what they wanted in the future park area.

Along the way, the students have been introduced to how to design an urban space. In groups, they have worked with methods for developing ideas, researched the area’s characteristics designed concepts and ideas for their dreams for the future of the area. Finally, they have learnt to verbally formulate their plans in clear presentations and pitches.

The framework

Three weeks of co-design activities

Week 1

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>Participation</td>
<td>Biodiversity</td>
<td>Ideation</td>
<td>Prototyping</td>
</tr>
<tr>
<td>GXN</td>
<td>SLA</td>
<td>GXN</td>
<td>GXN</td>
<td></td>
</tr>
</tbody>
</table>

Week 2

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iteration</td>
<td>Narrative</td>
<td>Day off</td>
<td>Exhibition prep.</td>
<td>Exhibition</td>
</tr>
<tr>
<td>GXN</td>
<td>Emily Ryge</td>
<td>GXN</td>
<td>GXN</td>
<td></td>
</tr>
</tbody>
</table>

Domea.dk

The housing administration company Domea.dk manages Gadehavegård and is responsible for the project management of the green park area.

AGORA

AGORA coordinated the three-week programme, running a series of parallel activities to the design workshop and lead the participatory research by the students.

SLA

Facilitated a day of learning and mapping centred on biodiversity and activism.

Emily Ryge photographer

Photographer participated to teach students about documentation, aesthetics, communication and biodiversity.

GXN

Designed and facilitated a tailored co-design process with the students across two weeks of engagement and workshops and one week of design production.
The first 15 minutes of the first day of co-design were dedicated to instructing the 12 teams of students to ‘set up’ a design firm for the following three weeks, choose a name, and design a logo. On the second day, each group received 12 sturdy plaques and 40 business cards displaying their logos and names in a professional style.

This gesture marked the beginning of the collaboration between the GXN team and the 12 student groups. Young people have an open approach to creativity and ideation - from the outset, the GXN approach was to take the students and their ideas serious on their own terms, while helping them develop ideas into engaging concepts and professionally looking designs.

This collaborative principle was fundamental throughout the process and proved invaluable for building trust and boosting the students’ motivation. Their name and logo became a returning element for the three weeks and helped make the collaborative ambition and approach tangible from day one.

The twelve teams:

- **NePh** - Rupendra, Sashank, Seven
- **Supernova** - Vlorentina
- **Sport Time Architects** - Adam, Wissam, Yad
- **HALO** - Aya, Lorin, Hadi
- **ZF C** - Zaina, Cristi, Farishta, Daria
- **OOT** - Alayna, Abdul, Benyamin
- **Nextgen** - Esra, Nilda, Cansu
- **Patron** - Malaika, Mikail Arda, Noor
- **IXA** - Ahmed, Ilayada, Xhensila
- **SFM** - Selin, Feyza, Merve
- **Hana** - Nawal, Holger, Asma
- **SRS** - Medina, Agnus
Fieldwork On the second day, experts from SLA helped students learn about biodiversity, and how different layers of vegetation, terrain shifts and old tree stumps together with wetlands create habitats for plants and animals.

In the afternoon the groups headed off to the Hakkemosen nature area, a 15-minute walk away. Using their smartphones, they logged on to the ‘Our Walk’ app to look for and document six types of biodiversity with photos. They were asked to reflect on what nature means to them and comment on how they feel when looking at their pictures and those of their fellow groups.

On another day, the students took to the streets of Gadehavegård to interview residents and collect data on the perceptions, experiences, and thoughts of citizens in the area.

Following this, they went out looking for specific situations they wanted to change or improve, and collected photos and notes of these.

Our Walk App The app is developed by AGORA as a tool to facilitate engagement of citizens, by offering an accessible digital platform for shared documentation. The tool is designed to help urban planners to have a rich datascape representing a wider population. The app provides tool for general involvement and for capturing a variety of impressions. These are visualised and mapped to create a rich datascape about what is important to users in an area.

AGORA facilitated participatory research into the area with the students and biodiversity experts from SLA, in order to better understand the design challenge.
The design process

Think it, Sketch it, Show it!

By demystifying tools and processes commonly used by designers, the co-design process took young people through creation of ideas from conception to final designs.

“What do you like to do in your free time?” “What would you like to do, that you do not have the opportunity to do now? These were the questions that guided the design process of the students and the design of 12 ideas for the Gadeghavegård Park 2030.

The co-design process was conceived and developed by GXN to take the students through the processes that happen every day within an architectural office. During the first week, workshops focused on inspiration, ideation, and prototyping. In the second week GXN’s design team produced models and visualisations of their designs, while the third week focused on refinements and final exhibition and pitches.

Inspiration: teams were introduced to the design process and were encouraged to set up a design company with a name and logo. They were introduced to “a day in the life of an architect” and began brainstorming and developing ideas.

Ideation: starting from the brainstorm and reflections, each design team developed first concepts using sketches, references, and inspirational images. Facilitators from GXN helped the discussion among teams.

Prototyping: here focus was on transforming concepts into specific design solutions. Students were provided with four tools: physical models, sketching, generative AI images, and a material selection. By the end of the day, the outputs of these tools offered a clear representation of the student project’s intentions.

GXN production: with the materials generated, GXN returned to the office and transformed the 12 ideas into 3D models and realistic images, giving tangible form to the students’ ideas.

Iteration Day: the third week commenced with students reacting to the models and visualizations, providing feedback and comments for final iterations.

Exhibition Day: The last two days of the second week were devoted to preparing and conducting an exhibition of ideas. As in any design process, communicating the idea and selecting materials that best represent it are pivotal moments for gathering feedback and critiques from external stakeholders and for providing collective feedback on the creative process.
Having a team of designers help the students visualise their ideas and bring their project to life was a key aspect of the co-design process. Ultimately, this approach was what differentiated the process from business-as-usual design workshops. From day one student ideas and sketched were transformed into professional-looking graphics by the GXN design team.

**From sketches to 3D**
Transforming sketches into 3D models required well described projects unfolded by the different tools provided in the workshops (design stations, concept template, etc). Specific design ideas and sketches were developed in the workshop to enable this, e.g. "a long curved bench for four people with a circular table in the middle covered by a light roof" rather than simply "a bench".

**Defining strengths and views**
The aim of the 3D modelling was to have a set of 1-3 views to illustrate each project. It was important to understand the strengths of each project from the outset and to define which views would best convey the concept. Students were presented with initial models allowing them to provide feedback and tweak designs to meet their demands.

**Design iteration**
The iteration of the models took place after presenting the first set of visuals to the students. For this part of the production, Student feedback was then implemented in the designs.

**Final exhibition panels**
Final exhibition panels were designed and developed over 2 days by GXN based on student materials and feedback. Time efficiency was ensured by a consistent layout and organised information. The were designed and printed in an A1 format and served as the main tool for each team’s presentation and exhibition.

All models and visualisations developed by the GXN team come from student concepts, sketches and models. The goal was to represent these as faithfully as possible, showing the students that their ideas merited proper treatment.
Final exhibition
A morning to share ideas

Pinning up their projects and presenting them to external guests ensured that students retained ownership of their output, while feedback from stakeholders further enforced the ambition of taking their input and work serious.

The activities and design process ended with an exhibition of the 12 projects, where each team presented their ideas to a wider audience made up of the Mayor of Taastrup, representatives from Dornea, members of the Gadehavegård Residents’ Council, municipal experts, and parents.

Set-up
The exhibition was set up the day before presentations, with each group receiving an A1 poster to pin up along with other materials produced during the weeks (sketches, diagrams, models, etc.). Each team chose a space and decided how to display their project themselves.

Pitching
The day before and the hour before the exhibition, the GXN and AGORA team helped the students test pitches and presentations. Each group decided how to present the project and who would say what. The presentation time was 5 minutes for each group.

Exhibition
The exhibition and pitches lasted about two hours. Guests were divided into groups and moved from pin-up to pin-up. Each presentation was followed by a question and answer session. At the end of the exhibition, the external guests and the facilitators gave specific feedback to each group. A final moment was devoted to awarding special prizes to each project.
“They have learnt some professional techniques. And they have been allowed to be themselves - authentic - because they are also the authentic end-users with wishes for what the nature area should enable them to do in the future. So, they’ve been allowed to say some things that there might not normally be room for in the classroom. I think that’s kind of cool.”

Camilla Kikkenborg, teacher
“It’s a great idea to involve young people in this way. After all, they are the ones who will take over from us. There are certainly useful ideas among the suggestions. For example, the idea with the shelters is exciting. They could perhaps be placed along the noise barrier, and these are actually some of the ideas we have been working on ourselves. So, it resonates with me. Especially because it will be a large area that we need to develop in a good and exciting way with room for everyone.”

Jesper, member of the Resident Board in Gadehavegård
"I think it’s exciting. It’s interesting to hear what young people think about activities and about involving nature more and creating space for biodiversity and circularity. It’s also interesting that many groups want places where they can find peace and quiet together and socialise - or perhaps be alone. Several groups are also working on new ways of using light as a feature in buildings or in the neighbourhood to create a sense of security, and this is also something that is exciting to continue working on."

Pia, Chairwoman of the DFB Resident Board in Gadehavegård
12 designs result
“Our goal is to create a cozy place where you can sit and relax, where you can eat and see a great view. It will be furnished with a sofa, bean bag, window, and a fridge.”
“Our goal is to create a social flower market and a flexible marketplace that brings people together.”
Visualisation of Chill Nova by Supernova

“The goal is to create a place where you can relax alone or with others and experience a spectacle of light and moods. At night, it will transform into a sculptural piece.”
Visualisation of Walk on the water by ZfC

“Our goal is to create a combined wetland and a bridge. It should have rocks in the water that you can walk on, a path with flowers around it, and seating areas with silence and a great view of flowers and water.”
Beyond the workshop
Outputs & learnings

Following the co-design process, GXN produced a report collecting insights, design principles, and designs from the workshops. The document aims to inform and inspire the future design of the park from the perspective of young people.
Logo examples

The design team transformed the logos sketched by students into professional-looking logos that student teams carried throughout the process.

Concept templates examples

Concept templates with a simple A3 layout. On the left there is space to write the title and the goal of the project; on the right space to collect relevant reference images and initial sketches.
Physical model examples

A 25x25 cardboard base serves as the base for every group to build their own physical model. It is suggested to prepare elements such as trees and human silhouettes before the workshop starts. Models in the photo were done by students in less than one hour.

Material palette examples

A range of material samples for participants to see, touch and smell. Groups can create their own project palette. If samples are not available, the same process can be done with material pictures.
**Sketches examples**

Aim for the creation of sketches that are specific and suggest a precise design direction. Use of colour can help identify atmospheres and materials.

**AI generated images examples**

Using AI generative tools allowed students to suggest possible design solutions according to their ideas and ambitions. The tool is not intended to provide final design outputs, but rather inspiration on form, material use and atmospheres.
3D visuals examples

First design translation, from sketch to 3D resulted in simple visuals for participants to comment, iterate and provide further detailing.

Final visuals examples

Finalised views that incorporate comments and feedback from participants, as well as material specifications defined during the prototyping and iteration steps.
Exhibition panels were used to guide final presentation and exhibition. Each panel presents the final proposal with sections dedicated to title, goal, design elements, and circular materials.
“We hope that we can use the young people as ambassadors to get more citizens involved in the transformation of the neighbourhood. Our task is to convince them that we actually mean it when we say we want them to be part of the process.”

Lisbeth Engelbrecht Jensen,
Domea.dk project manager, organiser of Gadehavegård activities