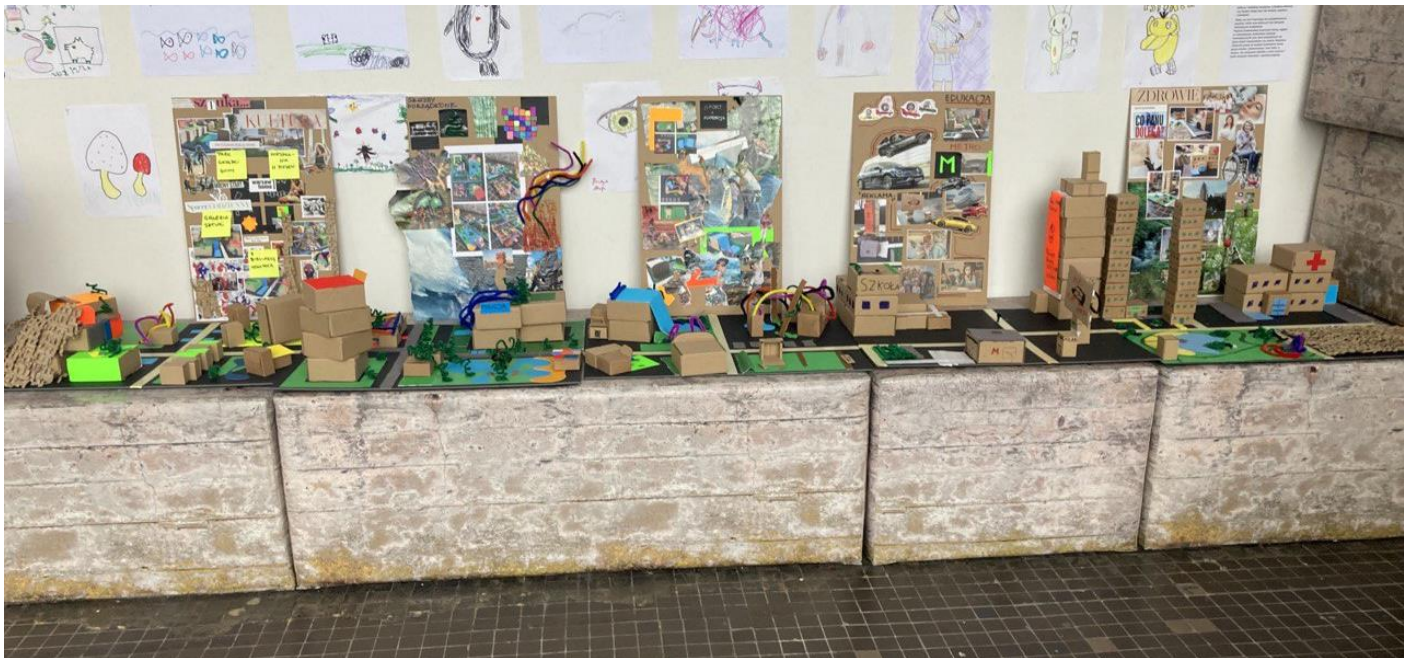


Building a City

Architecture Workshop for schoolchildren

Manual & toolkit



Goals of the workshop

Nowadays the city is to be the natural place of modern man's life. The process of building it, creating internal relations and dependencies should be understandable to its inhabitants. Hence the need to translate basic urban relations to the youngest children and teenagers.

The workshops explore the interrelationships between people, architecture, urban planning, social and urban culture. Attention is also paid to the heritage of existing architecture and urban plans. During the workshop, knowledge is gained about the city, its creation and planning, the main elements of the modern city, the importance of heritage in it.

The main assumption of the workshop is to introduce issues of relations between people, architecture and urban planning as far as culture of social and urban life.

Workshop focused on [children's] awareness of the surrounding space. By making their own model of the city they are able to:

- understand the process of designing and building;
- understand human impact on the city and relations between new and existing urban tissue;
- understand architectural and urban traditions and the relationship between shaping the city and the concept of the "common good";
- find the city as a human-shaped space: respecting the context and heritage as a basis for future creation for all people; at the same time they're discussing about variety of people's possibilities and accessibility needs;
- understand surrounding reality: the workshops shows that what we do in the city (public spaces, buildings, infrastructure, etc.) stays for longer and is used by (various) people;
- find the city as a frame for social life;
- develop a sense of responsibility for urban space, its condition and humans interactions with public spaces and buildings.

Group 1 (youngest children)

Workshop for younger children (7-10 y.o.), working together in a group of 15.

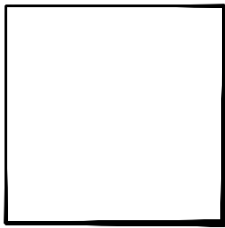
Duration: 2 hrs.

Main supplies

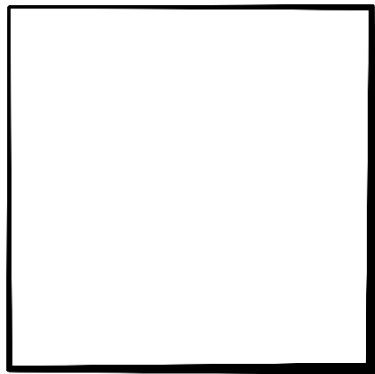
- To build a city:
 - modelling cardboard (thickness: 3-5 mm) – B1 size (70 x 100 cm) – as a plot,
 - boxes (at least two sizes),
 - glue (tube and stick), adhesive tapes,
- To make individual character: cardboards, coloured papers, colored textured cardboard, coloured felt, fluffy wires, crayons, felt-tip pens, felt-tip markers, paints.

Preparation before workshop

Assembling the boxes:



approx. 30 x 30 x 30 cm – 25 boxes



approx. 50 x 50 x 50 cm – 25 boxes

It is possible to use also some smaller boxes for building / space details:



approx. 10 x 10 x 10 cm – 15 boxes



approx. 5 x 5 x 5 cm – 15 boxes

Detailed list of materials

Materials	For each group	Total
cardboard B1 (70 cm x 100 cm)	---	5
boxes (50 cm x 50 cm x 50 cm)	---	25
boxes (30 cm x 30 cm x 30 cm)	---	25
(not necessary) boxes (10 cm x 10 cm x 10 cm)	---	15
(not necessary) boxes (5 cm x 5 cm x 5 cm)	---	15
coloured cardboard (B2/B1 size)	---	16
1. green – 2 pcs.		
2. dark green – 2 pcs.		
3. blue – 2 pcs.		
4. dark blue – 2 pcs.		
5. sand – 2 pcs.		
6. red – 2 pcs.		
7. yellow – 2 pcs.		
8. brown – 2 pcs.		
coloured textured cardboard (mixed-colours pack)	---	5
self-adhesive coloured paper block	---	10
ruler 30 cm	---	5
scissors	---	15
coloured felts – A4 size (pack of 5 colours: green, grey, blue, yellow, red)	---	5
fluffy wires 30 cm (pack of 25 pcs. - coloured mix: blue, yellow, brown, red, orange, violet, green, black)	---	5
fluffy wires 30 cm (pack of 25 pcs. - green)	---	10
felt-tip markers – 12 colours	---	5
coloured felt-tip pens – 12 colours	---	5
pencils	---	20
pencil sharpeners	---	5
poster paints (6 colours)	---	5
brushes set (3-5 different brushes)	---	10
water cups	---	10
double-sided adhesive tape – 25 mm	---	5
glue stick	---	5
glue tube	---	5

Timeline of work

1. Introduction: story about city (10 min.)

Workshop room: each cardboard (B1) is a plot for building(s). Spaces between plots are street grid. The architect/teacher explains:

- what is the city and how was created during the centuries,
- what are the basic elements of contemporary urban space,
- what are the main dependencies in the modern city,
- what the street grid and plots are, what role it plays and how the buildings are shaped in relation to the plots / street grid, why we need to obey the grid / plot system & how it works during the city planning (and for whom we build the city).

2. Building site (90 min.)

Children create street grid on terrain, make some divisions of the site into functional zones (public / private / greenery / water) and different functions.

Children create buildings on the functional zones (using boxes / papers / cardboard etc) and decide on their location. Architects & volunteers assist in choosing a plot, help in placing the building in street grid (within the boundary of the plot!).

Children can give their building a function and form (individual character).



3. Discussion about the city (10 min.)

Architects / volunteers and children discuss their buildings (form, function) & possible users:

- Is it accessible for all?
- Is it animals-friendly?
- Who and how can use the space?



4. Trying different layouts of function connections (10 min.)

Architects and children arrange boards differently.

They check which layout makes the most sense, which functions should be close to each other (e.g. residential buildings and greenery) and which should be far away (residential buildings and fire brigade / hospital)

5. At the end architects / teachers / volunteers encourage children to take a walk around the city (with parents / guardians) and see / feel / check what it looks like and how it works.

Group 2 (older children)

Workshop for older children (10-12 y.o.), working in groups of 4-5 people.

Duration: 2 hrs.

Main supplies

– To build a city:

- black modeling foam board (thickness: 5 mm) / black modelling cardboard (thickness: 3-5 mm) - B2 size (50 x 70 cm) – as a plot, one for each group,
- boxes (at least three sizes),
- glue (tube and stick), adhesive tapes.

To make individual character: cardboards, coloured papers, coloured textured cardboard, coloured felt, fluffy wires, crayons, felt-tip pens, felt-tip markers.

Preparation before workshop

Assembling the boxes:



approx. 10 x 10 x 10 cm – 50 boxes



approx. 10 x 10 x 5 cm – 50 boxes

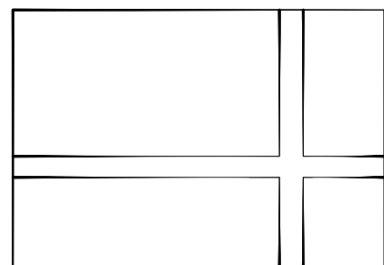
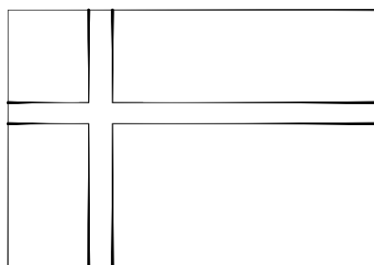
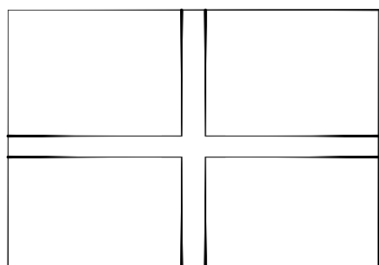


approx. 5 x 5 x 5 cm – 50 boxes

Assembling the street grid on plots:

On each cardboard teacher/architect prepare two lines – street grid – made from adhesive tape. Those lines are streets / roads. Children can make more streets but cannot make less.

Streets should be made on different ways (on the center / on sides) to make plots on different sizes.



Detailed list of materials

Materials	For each group	Total
foam board / cardboard B2 (50 cm x 70 cm)	1	5
boxes (10 cm x 10 cm x 10 cm)	10	50
boxes (10 cm x 10 cm x 5 cm)	10	50
boxes (5 cm x 5 cm x 5 cm)	10	50
cardboard B2	4	20
A4 printing paper (1 ream)	---	1
coloured cardboard (B2/B1 size) 1. green – 2 pcs. 2. dark green – 2 pcs. 3. blue – 2 pcs. 4. dark blue – 2 pcs. 5. sand – 2 pcs. 6. red – 2 pcs. 7. yellow – 2 pcs. 8. brown – 2 pcs.	---	16
coloured textured cardboard (mixed-colours pack)	1	5
self-adhesive coloured paper block	2	10
ruler 50 cm	1	5
ruler 30 cm	1	5
scissors	3	15
coloured felts – A4 size (pack of 5 colours: green, grey, blue, yellow, red)	1	5
fluffy wires 30 cm (pack of 25 pcs. - coloured mix: blue, yellow, brown, red, orange, violet, green, black)	1	5
fluffy wires 30 cm (pack of 25 pcs. - green)	2	10
felt-tip markers – 12 colours	1	5
coloured felt-tip pens – 12 colours	1	5
pencils	4	20
pencil sharpeners	1	5
double-sided adhesive tape – 25 mm	1	5
double-sided adhesive tape – 15 mm	1	5
pins (pack)	1	5
glue tube	2	10

Timeline of work

1. Introduction: story about city (10 min.)

Workshop room: each foam board / cardboard (B2) is a city block with streets and plots for buildings / greenery etc. Spaces between plots are street grid. The architect/teacher explains:

- what is the city and how was created during the centuries,
- what are the basic elements of historic and contemporary urban space (street grid, city blocks etc),
- what are the main dependencies in the modern city,
- what the street grid and plots are, what role it plays and how the buildings are shaped in relation to the plots / street grid, why we need to obey the grid / plot system & how it works during the city planning,
- for whom we build the city: different ways of seeing / touching / moving through the city (story about different abilities of people, depending on their age, health and individual situation).

2. Building site (90 min.)

Children work in groups.

Each group has its own city block with street grid and one main function, that has to be placed in this block. Children can choose other functions, which should combine or complement the main function.

Children create buildings, greenery, water (using boxes / papers / cardboard etc) and decide on their location.



Architects & volunteers assist in choosing a plot, help in placing the building in street grid (within the boundary of the plot!), and act as mediators in resolving possible “neighbour disputes”. They also help in choosing the right form for the function.

Children can give their buildings / spaces a function and form (individual character).



3. Discussion about the city (10 min.)

Architects / volunteers and children discuss their buildings (form, function) & possible users:

- How the individual city blocks works? How they work separately and connected to each other?
- Which functions should be separate and which should have connections?
- Is the city accessible for all? Is it animals-friendly? Who and how can use the city space and buildings?



4. Trying different layouts of function connections (10 min.)

Architects and children arrange boards differently.



They check which layout makes the most sense, which functions should be close to each other (e.g. residential buildings and greenery) and which should be far away (residential buildings and fire brigade / hospital).

5. At the end architects / teachers / volunteers encourage children to take a walk around the city (with parents / guardians) and see / feel / check what it looks like and how it works.

Group 3 (teenagers)

Workshop for teenagers (13-16 y.o.), working in groups of 3-4 people.

Duration: 4 hrs.

Main supplies

- To take the photos during the walk in the immediate area:
 - Polaroid / instax and photo papers; alternative: smartphones and photo printer,
 - maps of the site.
- To make posters about “future of the city”:
 - cardboard (thickness: 3-5 mm) – approx. B2 size (50 x 70 cm) – as a poster background,
 - glue (tube and stick), adhesive tapes,
 - coloured papers, coloured textured cardboard, coloured felt, felt-tip pens, felt-tip markers, post-its,
 - old newspapers / magazines / posters etc. (people / buildings / animals etc. silhouettes).

Preparation before workshop

Assembling the simplified map of the neighborhood: it is recommended to use simplified Google map – cleaned in Photoshop or similar – or Snazzy map → <https://snazzymaps.com>).



Detailed list of materials

Materials	For each group	Total
cardboard B2 (50 cm x 70 cm)	1	5
A4 white printing paper (1 ream)	---	1
A4 coloured printing paper (1 ream)	---	1
coloured cardboard (B2/B1 size) on various colours: green, dark green, blue, dark blue, sand, red, yellow, brown	---	8
coloured textured cardboard (mixed-colours pack)	1	5
self-adhesive coloured paper block	2	10
ruler 50 cm	1	5
ruler 30 cm	1	5
scissors	3	15
coloured felts – A4 size (pack of 5 colours: green, grey, blue, yellow, red)	1	5
felt-tip markers – 12 colours	1	5
coloured felt-tip pens – 12 colours	1	5
pencils	4	20
pencil sharpeners	1	5
double-sided adhesive tape – 25 mm	1	5
double-sided adhesive tape – 15 mm	1	5
pins (pack)	1	5
glue tube	2	10
optional: printing photo paper (1 ream)	---	1
optional: Instax / Polaroid	1	5
optional: Instax paper / Polaroid paper (set)	2	10
old newspapers / magazines etc.	---	---

Timeline of work

1. Introduction: discussion about nowadays cities (20 min.)

Main topics:

- what is the city and how was created during the centuries & nowadays?
- what are the basic elements of contemporary urban space: which are necessary and which are optional, what is important to whom,
- what are the main dependencies in the modern city: heritage?, new ideas?, people and their possibilities? or maybe the city is a commodity / object?,
- what determine the shape of modern city: discussion about the role of decisions and the role of accidental / random operation,
- how the functional zones are developing and how it works during the city planning (and for whom we build the city),

- the role of analysis and idea-plan in city planning,
- for whom is built the city: different ways of seeing / touching / moving through the city (story about different abilities of people, depending on their age, health and individual situation).

2. Walking around the city (90 min.)

Participants - equipped with maps and polaroid / instax / smartphones - walk in the neighborhood. They analyze what it looks like. They take pictures of what works and what needs to be changed. They mark individual places on the map.

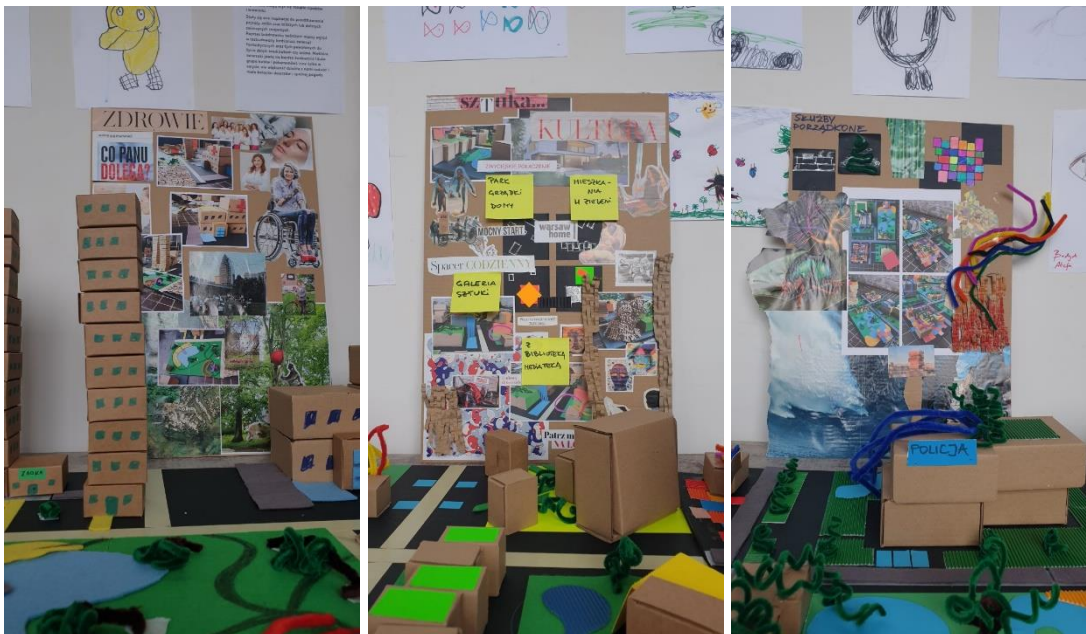
The walk aims to analyze the city, its connections and spatial arrangement:

- mapping the form and function and their interrelationships,
- searching for places full of people and empty, abandoned spaces,
- trying to find out why some places live and others don't,
- trying to find the relations in the city: old vs. new, public vs. private, bad vs. good quality, city life vs. empty zones etc.

3. Idea-plan for the city / neighborhood (90 min.)

Participants work in groups of 3-4 people. Each group selects several photos (up to 10) as the basis for their poster.

The poster is created as a result of the work of the whole group: their shared vision of the "city of the future" and joint decisions about what should be changed in the city (new functions, new forms), what to keep and in what form (fully? partially?).



At the same time, the visual form of this performance is created as a compromise between people in the group.

4. "What is missing – what is added" – discussion

Poster presentation and discussion about the future city.



Urban planning terms

Those terms are useful during the discussion of city shape and function.

Older children and teenagers should get to know them during the workshop. Some of these concepts may be difficult for children, but it is worth introducing them slowly when talking about the shape of the city and its functions.

Functional program of the city

is a list of buildings, services and places that should be planned and placed in a city project, such as:

- flats;
- communication (i.e. sidewalks, bicycle paths, streets, stops and parking lots) everything that allows you to safely, conveniently and quickly move around;
- greenery / nature / plants: parks, squares, as well as places to rest and play (recreation) such as playgrounds, playgrounds;
- places for neighbors in squares, green courtyards, in home gardens, so that they can get to know each other better;
- accompanying services, such as: shops, pharmacy, ATM, post office, nursery, kindergarten, school, community center, community club, clinic (possibly emergency services: police, municipal police, fire brigade, ambulance service).

City block (quarter)

it is a small area, closed and separated in the urban tissue by the surrounding communication routes (streets, pavements, bicycle paths) or other boundaries (park, river bank, etc.).

The quarter is usually separated by four intersecting streets. It is a developed and used space, it has various functions. It includes built-up and undeveloped space. Free space is usually located inside the quarter.

Along the streets there are buildings (e.g. tenement houses), often forming a compact frontage development (i.e. buildings located in a "row" next to each other), with service points (such as e.g. shops) on the ground floor and apartments on the upper floors.

Central layout

in the center of this arrangement there is a square and the streets divergent from it perpendicularly or radially.

Public space

a public place, decided not only by residents, but also by local or city authorities. It includes squares, squares, parks, streets, all those places where anyone who wants to can find themselves.

Neighborly space

is a place in a housing estate where neighbors can meet each other to get to know each other better, e.g. squares, gardens on the ground floors of blocks or, for example, estate clubs.

Private space

it is the interior of an apartment, a house, a space to which only people living in it have access, or those who are inside thanks to the invitation of the owners of this space.

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