

# de-a architectura in my city

Architecture & Build Environment Education For Primary School  
Teaching Resource Presentation

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# Why architecture & build environment education

The build environment is where we spend most of our lives, is the man made environment. It depends on the natural setting where it is placed, it can be rural or urban. It bears the traces of the past, being lived in the present and is prepared for the future. People leave their mark on it, transforming it accordingly to their technical capacities and to fulfill their needs and aspirations.

The build environment education is for children a key for understanding and involvement in the environment they live in. It is also a way to find out what gives it value and how they can improve it now and later, being also a way for the development of their civic sense.

It is a way to enrich their visual culture, to be accustomed with a new vocabulary, to practice and to encourage their creativity, curiosity, personal initiative, critical sense, communication abilities and the communitarian spirit.

Because the **build environment education** is a complex discipline this resource makes links to all the curricular fields the children study in the primary school. In this way it is also a tool of recapitulation and application of the new knowledge acquired . The proposed didactic resources can be used also for other disciplines.





# Why we created this resource

A shift in the Romanian architectural culture paradigm can be made only if we start with the children education, the future citizens and the ones who indirectly influence the judgments of their parents.

Our aim is to help the children understand the architecture and the build environment, and implicit the complex processes that shape the environment they live in. Their house, their neighbourhood, their city and their community shape this future citizens, send them a message about their place in the world and affect the physical and psychological qualities of their lives. **The quality of architecture** and of the build environment of tomorrow depends on them.

Future adult citizens, users, clients and decision makers, they should be able to **actively participate** in shaping the world they will live in. They should be able to create communities with a healthy and harmonious life, using innovation as well as the cultural heritage.

The long term aim of DE-A ARHITECTURA cultural programme, this course being part of it, is the introduction in the national curriculum, of the **architecture and build environment education**, even as an optional course. It also wants to encourage and guide the teachers to use the **build environment and architecture** as teaching resources in the study of various disciplines.



# How to use this resource

## How to teach it

The course can be taught as a whole or split on the thematic books.

One book can also be used separately by the teacher for an interdisciplinary approach of certain notions from the current curriculum.

## By whom

The pilot application will be taught in the full version, by a team of architects and architecture students who will assist the class teacher. All should have attended the training workshop designed for this course.

## What does this teaching resource contain

The teaching resource is on a DVD and contains:

**Chapter 1:** the teaching framework and the lessons, the homework and the necessary material for them.

**Chapter 2:** the pupils working sheets for class exercises and lessons resume sheets that the teachers will print:

- the working sheets are questionnaires, schemes, drawings, photos, maps, etc., on which the pupils work in class and in expeditions or use for homework, depending on lesson.
- the lessons resume sheets are made to help them remember the lessons and consist of 1,2 definitions, keywords, a drawing or a photo, a '**did you know**' part and a '**to investigate**' part.

**Chapter 3:** the necessary data base for teachers to deepen the lessons and for the smooth running of the lesson. It has PowerPoint presentations for the lessons containing images, drawings and schemes, the workshop guide, the expedition guide, a glossary, bibliography and useful links.

# Study programme

## I. Observe & Analyze

There are 5 steps of urban built environment exploration and they are described in the 5 thematic books.

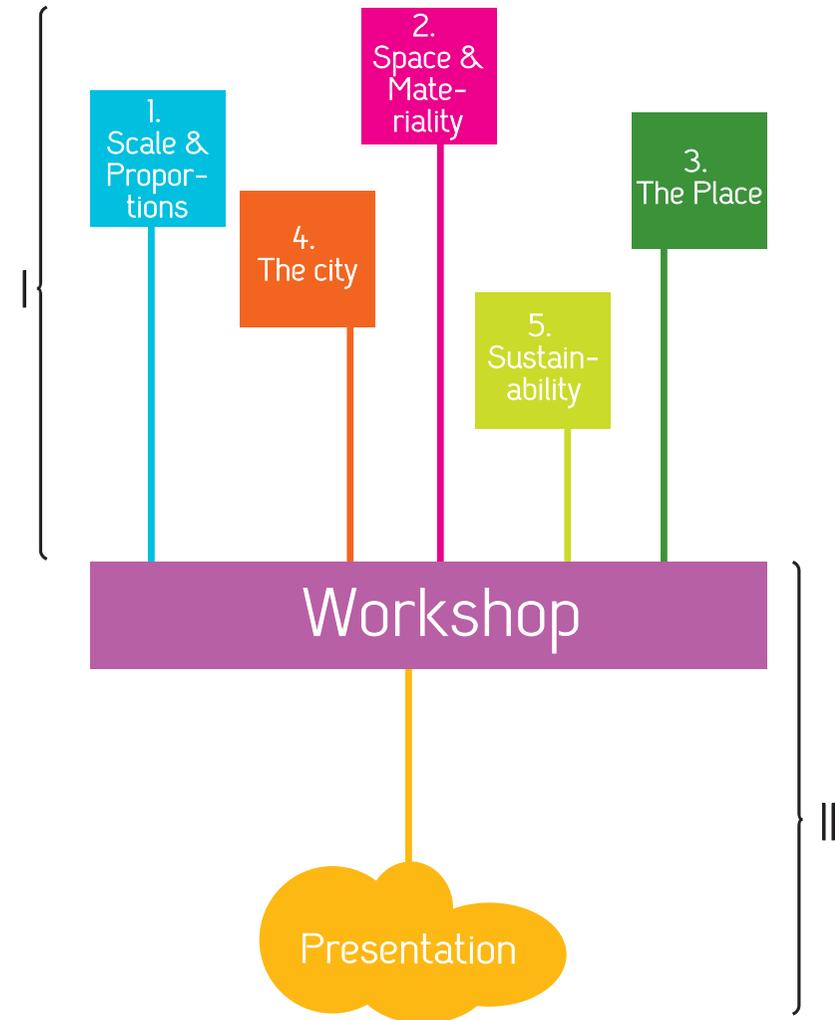
There are expeditions in the city and classroom activities where the new notions are introduced by analyzing the material brought from expeditions, through PowerPoint presentations and various games.

## II. Built & Present

This part is the class common project and its outcome is a model of the city they imagined accompanied by other artifacts necessary to explain their work at their final presentation in front of a broad audience.

The first part emphasizes the child individuality, on his personal way of understanding, perceiving, asking questions and creating something related to this notions. The idea is to make the children **discover, intuit and interpret** them. The result is a personal journal book, **de-a architectura journal**, where they gather all the new notions they discovered/studied along with their personal preferences. Here they will also put the games and homeworks.

In the second part this notions will be resumed, completed and applied in a **collective creative process**. This part emphasizes the idea that the city is a **community** and all the things that make it are the result of a collective process, good or bad, depending on the level of communication and understanding between its citizens. In this part the children will exercise not only their practical abilities but also their abilities to **work as a team**.



# Study methods

## **Methods:**

learning and preferences journal, group discussions, guided discussions, role game, teamwork, inter active presentations, questionnaires, case studies, creative games that develop observation skills and artistic and technical intelligence.

## **Expression tools:**

drawing, photography, collage, model making, talking and writing skills

## **Skills development:**

to investigate, to analyze, to critique, to synthesize, to represent, to make connections, to express a personal point of view, to practice team work and collaboration, to hypothesize, to imagine, to invent and communicate ideas.



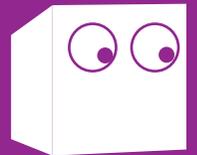
# Introduction

## 1. What the built environment is

What the architects and urbanists do

What we will do together

## 2. Children's lifestyle and self-portrait



People shape the build environment the build environment shapes them.

Two introductory lessons focusing on the interdependence relationship between people's way of life and their life environment, named also the build environment.\*

The invited architects introduce themselves and speak about their job. The pupils introduce themselves also, say some words about them and try to describe their current lifestyle by filling in a brief questionnaire. The homework is their self-portrait in writing, which can be sustained by drawings or collated pictures. This will be completed as the course advances with new data and preferences.

The images about the build environment are with good and bad examples, familiar and unfamiliar to the children. What you like, what you do not, why, what would you like to change, how could you change, what should you know to be able to do this, this are the questions of the free discussions.

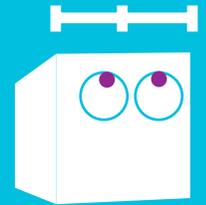
\* the phrase **build environment** refers to the whole man build environment, from the most humble shelter to buildings, from the cities to the territorial infrastructure. It is a material, spatial and cultural product of man. The actions upon it are seen always as a process in development, their analysis implying the past and the future of it.

The build environment studies are an interdisciplinary field, comprising notions from architecture, design, urban planning, landscape design, technologies, geography, sustainable development, public politics and economy.



# Book I: Scale & Proportions

- human measures, measurement units, ergonomics
- architectural drawings and their scale, proportions, scaling
- city scale, distances and our perception - expedition
- city scale, distances and our perception - the expedition analysis



Small, big, fit for me, when we compare our dimensions to the dimensions of the build environment we say that we give it scale.

The dwellings and the interior spaces are made after the human measures. But how is the city build environment? The buildings proportions and the scales influence our physical and psychological wellbeing.

What really means **the man is the measure of all things**? If we measure ourselves do we notice any link between our dimensions and the dimensions of the usual objects, of the interior spaces or of the buildings?

How can I draw exactly the object that I measured? What is a map? How can we shrink ourselves to fit in it? What scale means? What is proportion?

The first two lessons seek the answer to this questions through pupils experiments. They measure and check the objects dimensions, draw them, learn to scale them, discuss.

If the interior build environment is fit to my dimensions, how is the exterior build environment? What kind of feelings do certain dimensions of urban spaces or buildings rise?

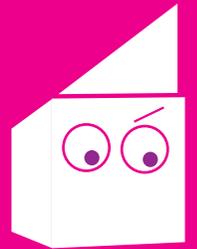
How does my perception change according to distance or speed? Which is the proper distance from where I can communicate with the people on the street? What does city scale mean? How many senses can I use to understand the build environment?

The next two lessons are an expedition and its analysis. They will take pictures of themselves near buildings and in spaces of different dimensions, they will take pictures and notes about the things they observe and about how they can communicate with each other from different distances. The lessons will be completed with a visual presentation of suggestive pictures about the **city spaces scale**.



# Book 2: Space & Materiality

- space and materiality - expedition
- space and shape
- light and color
- materials and textures
- rhythm and composition



The knowledge of the build environment architectural **alphabet** enable us to sense the value of any space of our city or in a city visited for the first time.

“Listen to the sounds in front of your house for 3 minutes, with eyes closed. Describe the building sound, the space sound, the people sound. Draw the image you see in front of your home with black pencils and then mark the sounds you noticed with colored pencils. “Did you ever thought that you can understand and describe an urban space only by listening to its sounds?

But what is the urban space? How do we call the space between the city buildings? How does its atmosphere change accordingly to its light and colors? How do we perceive that space when we can touch the materials it is made of? What do the shapes of the surrounding buildings tell us? Do we notice any rule in the design of their facades?

The book starts with a city expedition, followed by 4 class lessons about the urban space and the architecture language.

The expedition challenge is to teach them to look at the build environment with different eyes, to be able to perceive it with all the senses. The little build environment explorers will be split in 4 teams, each with its own tool: a mirror, a chalk, a blindfold and a frame.

The teams collected data will be discussed in the following lessons. They will practice every notion through games, one implies clay modeling, another drawing, a riddle and free discussions.

The lessons will be completed by a set of adequate pictures and explanations.

This kind of questions: How did you felt there? What did you noticed? What do you like? What you don't? Why? will accompany the visual presentations.



# Book 3: The place

- the place - expedition
- natural setting - geography and climate
- the place spirit
- the place memory



What does place mean and why do we enjoy some places while we dislike others?

It is a sum of physical, spiritual and historical features of an area, but also a mix of subjective associations, meanings and relations. The built environment is a component of the place and it can interact harmoniously or conflictually with certain features of that place.

Therefore is important to understand the relation between humans, their communities and the place they live in.

How did this landscape look like before the city started to grow here? Are the landscape, the sun, the wind, the rain related to the way my city developed? How do we feel in a new place, what does it say to us? What would you take with you if you move to a different country? Where do the names of our city streets come from? What is the story of the old buildings? How can we bring back to life the forgotten houses?

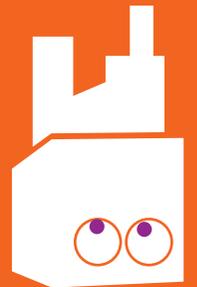
For the field trip the scouts split in collectors, reporters and photographers and gather clues about the place they visit: from the leaf of a tree to the menu of a restaurant, from the name plate of a street to a brief interview with a local, from a picture of buildings to one of people walking the streets.

The three lessons of this book help the children analyse the clues in order to devise a small tourist guide of the visited area or to come up with a story for the newspaper. The slideshows for each lesson focus mainly on the theme of place character and memory, of heritage.



# Book 4: The City

- let's get to know the city/ walking the city - expedition
- city skyline/ the city seen at people level
- components of the city/ the city birds see
- diversity of the cities/ the city seen from the airplane
- activities in the city/ function in the city
- life of the city/ how a city works
- rules of the city



Getting to know the city and its issues helps the children to start being socially responsible and to take part in the urban culture, leads to a positive attitude towards the city, increases the curiosity for the changes in the urban environment.

What do we see when we walk through the city?

If in our previous field trips we were paying attention to details, feelings and atmosphere, in the fourth expedition the pupils will try to find their way through the city by reading maps and deciphering city landmarks, in order to describe accurately what they are observing in the public space: not only what they enjoy or what bothers them, but whether the public space is adjusted to their needs.

They notice and analyze the components that make the city, they pay attention to the buildings they pass by, what activities they host, how the houses and the spaces in between look like, if they meet any obstacles on their route, what the people are using to move about in the city, if they notice any rule in the arrangement of the buildings. They write down existing problems and imagine possible ways to solve them.

**The City** book comprises a set of 5 lessons. The first 3 are discussing the components of the city. Information is introduced incrementally and intuitively, from the city seen walking, the city at eye level, to the bird's eye view and airplane view, following 3 scales of spatial approach. The next 2 lessons are speaking about the life of the city, of the way different sorts of people use the city.

Here the city is presented as an organism, with specific needs for transportation, infrastructure, green areas. The notions are introduced starting from the things the children have noticed about the activities and behavior of the people they know, from what they experienced during the field trip and from visiting other cities.

The slideshows that come with every lesson include a game that allows them to practice the notions in an interactive manner.

The entire last lesson is dedicated to a game – role playing – that will teach them about the roles of the main urban actors. The children will approach intuitively the concept of urban regulation, practicing in the same time their negotiations skills.



# Book 5: Sustainability

- what is sustainability
- green buildings - expedition
- green cities and renewable energies



By recognizing their place as a link in the line of generations, the children will be aware of how important are their behavior and their choices for creating the future of their own city.

How will your city look 30 or 50 years from now? How do we identify our daily behaviors that induce changes in the natural and built environment? How can we estimate their effects? These questions are difficult for an adult, but when they are introduced via 'the bread game' they are easily reaching the children.

How do we explain the sustainability diagram\*? The economic prosperity sphere, the social balance sphere, the environment protection sphere become 3 teams that have to debate on a given issue.

What is green energy? What about a green building? Can we have a greener city?

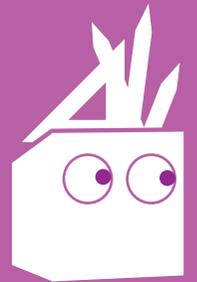
Even if a virtual or actual visit to a green building is the only thing they can do for now, they can use their imagination for seeing the green city of the future.

\***Sustainability** is a rule that we observe when we want to fulfill a need, so that our actions do not compromise the possibility of the future generations to fulfill their own needs.



# The Workshop

- the place and the people of our city
- our city
- the buildings in our city
- the image of our city
- our green city



There is very little emphasis on **team work, communication, collaboration, negotiation, solving problems as a team** in the Romanian school system and the results are visible in the society of today. A classroom full of children is a small community. How would a city built by this community look like? With the help of the concepts studied so far, they can imagine it, build it at LEGO scale and present it to others.

**The Workshop** is the practical side that means working at a common project, a model, the entire classroom being seen as a community that has to work together. The activities included here are the feedback and the practical side of the concepts introduced in the previous lessons, the children finding themselves in the situation of operating links between them.

It starts by describing the place and the way of life of the inhabitants of this city. The children receive a map 1:100 of the land – at the edge of a forest, by a river, it has a flat area and a small hill. There are 3 existing buildings, part of a former castle. The children have to come up with a story for that specific place, to bring it up to the scale of the LEGO people and to start building the model out of various recycled materials. Each child is represented by one LEGO man or woman that will own the story made by each child.

Next step is a series of guided discussions, free discussions, brainstorming sessions and negotiation sessions about how the city is being built, in which the children will have the opportunity to test all the acquired concepts.

Once they get to conclusions, they will start building and placing the buildings, paying attention to their dimensions and to the relations to the land and the neighbors.

For some of the community functions buildings and for the city's development vision groups of 2 or 3 children will also make A3 boards with drawings, text or collage.



# The Presentation

- preparing the presentation
- opening



It is important that the students assume the results of their work. They will present their work in an exhibition, they will discuss and debate it. They will learn how to make their work attractive for others and how to answer to their comments.

There will be two practical lessons for preparing the presentation. The materials that will be exhibited will be finalized, the main points in the speech are rehearsed and the speakers are nominated.

The presentation will be organized like an opening event, there will be a day dedicated to this and there will be invitations sent to other teachers, parents, colleagues, city hall and media.

For the pilot project there will be a joint exhibition of all participant classrooms and an event that will host the presentations of all the teams.

The results of the exhibition and of the discussions will be available on the school website and on the website of the DE-A ARHITECTURA program.



**De-a architectura - in my city** targets the children of the primary school and their teachers, as well as architecture students and architects that are willing to get involved in educating children about architecture and the built environment.

The course focuses on familiarizing the children with concepts of architecture and city planning by direct observation and creative application. The purpose is to develop a basic common sense in architecture, urban design /planning and civic action.

In order to be able to present these concepts to the children, the educators have to be well informed and to have an interest in these fields. That is why the pilot project wishes to involve architecture students and architects in order to help the teachers in the teaching process.

We'd like to invite the teachers and architects to attend the training workshop we have organized for this course.

# General data

**Name of the course:** De-a arhitectura - In My City, Architecture and Build Environment Education for Primary School

**Type of course:** optional course in different curricular areas

**Grade:** 3rd or 4th, primary school

**Period:** one full school year

**Number of hours per week:** 1 hour per week

**The author of the course:** 'de-a arhitectura' \* working group

**Teachers that will teach the course:** the class teacher + an architect + an architecture student



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The course **De-a arhitectura - In My City** is part of the cultural program **De-a arhitectura – Introducing The School Age Children To Architecture And Built Environment** of the Romanian Order of Architects, Bucharest branch.

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Photo: personal archives, "Re-start Sinaia" workshop by Studio Basar, [www.dreamstime.com](http://www.dreamstime.com)