

ARCHITECTS

primary school pupils' project

INTERCULTURAL MATHEMATICS LEARNING OUTSIDE OF SCHOOL

Primary goals of the project

- Detail mapping of selected recreation facility area and to propose a new functional use of the area from the perspective of children

Secondary goals

- Creation of map of the current state with use of surveying techniques
- Propose a new functional use of the area (focus on recreation for families with children)
- Incorporation of proposal into map of the current state

Target audience

4rd – 9th grade primary school pupils

Cross-curricular learning

Mathematics, Geography, Computer science

Pedagogical approach

Outdoor education,

Project-based learning, Inquiry-based learning,

Information-communication technology in education

Methodology

1. Tasks and discussion



Main idea: „Let's create our common space, little peace of our common World, full of game and joy.“

Discussion: Imagination of the ideal playground

2. Selection and recognition of area of interest



Evaluation the current state:

- purpose of individual objects and surfaces
- character of the landscape surroundings
- assessment of facilities
- presence or absence of facilities and services

3. Select areas for new functional use and define priorities



- replacement or reparation of existing equipments
- enrichment of existing playground with new elements
- design a new playground

4. Creating criteria for proposals



Examples given by teams of pupils:

- use, safety, cost, durability, aesthetic appearance ...

5. Selection of particular elements with use of catalogues and internet



- Individual work – selection of favorite elements
- Presentation of individual choices
- Team work on common proposal

6. Registration of proposals and creation of an overall budget for the purchase of selected elements



Future Map






Inventory

Item	Quantity	Cost/unit	Cost	Area/unit	Area
Large tree	4,0 m ²	300 €	1	4,0 m ²	300 €
Soccar	1,0 m ²	400 €	1	1,0 m ²	400 €
Bench	1,7 m ²	100 €	1	1,7 m ²	100 €
Playhouse	1,7 m ²	500 €	1	1,7 m ²	500 €
Bridge	1,8 m ²	300 €	1	1,8 m ²	300 €
Sandbox	3,2 m ²	100 €	1	3,2 m ²	100 €

Summary

Total price for all items:	1 750 €
Information about area use	
Total area:	100,0 m ² 100%
Area of proposed items:	13,4 m ² 13%
Area of safety zones:	13,9 m ² 14%
Remaining area:	72,6 m ² 73%
Statistical information about item price	
Min:	100 €
Max:	500 €
Mean:	250 €
Mode:	300 €
Median:	300 €

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Thank you for your attention!

