

Visual Mathematics in Practice

Name of the teacher:	Milena Životić
Name and address of the school:	Peta ekonomska škola "Rakovica" Hasanaginice 8, Belgrade
Theme of the lesson:	Polyhedron
Place in curriculum: (type of school, grade)	School of economics, 3 rd grade (3 lectures per week)
Age of the students/pupils:	17
Title of the lesson:	Polyhedron (systematization of topic by contstructing Polyhedron using Modular Origami)

Description			
of the lesson			

Time	Exercises, matters, parts of the	Methods and forms	Developable			
	lesson	of student activities	competencies			
5 min	Introduction:	Work in groups;	Systematization,			
	Short overview of area and volume	individual work	logical			
	of Prism and Pyramid.		conclusion,			
	Telling the students what is		creativity, task			
	Origami and Modular Origami and		keeping,			
	how it can be used.		flexibility of			
			thinking,			
30 min	<u>The main part</u> :		planning, looking			
	Task:		for connection,			
	1. According to the scheme		whole partial			
	using Modular Origami		skill perception,			
	method construct:		attention			
	a) the cube		keeping,			
	b) pyramid.		communication			
	2. What is the total area of the					
	paper that we need if we					
	would like to construct the					
	cube that has volume 27m ³ ?					
	<i>3.</i> What is the ratio of the side					
	of the sheet of paper to the					
	length of a side of a cube?					

10 min	4. What is the volume of the pyramid that you constructed?
	Summary: Discussion with students: analyzing what's done; how did they feel while they were doing it; what they got of this lesson and what kind of expirinece are they going to bring out with them when they walk out of classroom?
	Inspiration: Workshop at Family Day and Workshop that was held by Ruth Mateus-Berr (used for summary; applieing the expirience that I've got attending this workshop)

Summary

Giveing students the task to do something with their hands make them happy, make them to keep attention and focus to themselfs. They got more motivation for doing math and more selfconfident (by using math knowledge for constructing, even if tsome of them previously didn't have good mark).

Note: after the lesson they called friends from other classes to show them what they did.

Sup	plements			
Used materials:	There are files in the same folder as this file is kocka.pdf and piramida.pdf (I used Dino Andreazzi and Peter Bundi idea of making a pyramid).			
Photos:				