

DynaMAT

Comenius DynaMAT Slovakia

Vienna, 28 February – 2 March 2013

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Web page under permanent construction

- Translations to Slovak language
 - Austria GeoCaching
 - Bulgaria DynaMAT Art
 - Denmark
 Simulation of chi-quadrat distribution,
 Simulation of stochastics phenomenons
 - Iceland Euclidean Egs
 - Italy Harmony triangels
 - Slovakia
 Long sums

Dušan Vallo, Ján Beňačka, Marek Varga, PhD students Remarks for improving the original text

Didactics of Mathematics course

September – December 2012

- 18 student teachers
- Lecture about Dynamical approach in math education
- Promoting the project, web page
- Using Geogebra in solving maths problems
- Mathematical (Dynamical) problems solving Methods II
 - September December 2012
 - 8 student teachers
 - DK materials
 - Simulation of chi-kvadrat distribution
 - Dynamical simulation of stochastic phenomena using Excel
 - Big success!

..\Materialy_complet\SK_versions\Simulácia Chi-kvadrát rozdelenia-prerobene.doc

\mathcal{A}	Α	В	С	D	Е	F	G	н	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV
1		Počet hodov so 60 kockami					P	Početnosť hodov				Kvadratické odchýlky: (početnosť-10) ²													
2	č. kocky → č. hodu ↓	1	2	3	4	5	6	7	57	58	59	60	1	2	3	4	5	6	1	2	3	4	5	6	Súčty štvorcov odchýlok
3	1	5	6	2	6	2	1	1	1	5	4	2	11	12	9	10	10	8	1	4	1	0	0	4	10
4	2	2	3	5	6	4	6	2	5	6	1	5	11	10	7	6	13	13	1	0	9	16	9	9	44
5	3	2	5	5	4	2	3	4	4	4	2	6	5	16	11	14	5	9	25	36	1	16	25	1	104
6	4	2	3	6	3	4	1	2	3	6	4	3	11	10	10	17	7	5	1	0	0	49	9	25	84
7	5	1	6	3	4	3	1	4	2	6	5	5	12	6	9	10	12	11	4	16	1	0	4	1	26
8	6	2	2	6	6	6	3	1	6	4	1	2	12	11	8	6	13	10	4	1	4	16	9	0	34
9	7	5	6	5	3	6	1	1	6	3	4	5	7	13	10	8	10	12	9	9	0	4	0	4	26
10	8	5	3	6	4	5	5	2	1	2	1	5	5	10	11	12	11	11	25	0	1	4	1	1	32
11	9	2	5	5	1	1	5	3	3	3	4	1	12	5	14	8	13	8	4	25	16	4	9	4	62
12	10	1	5	2	6	2	6	2	2	6	5	3	8	12	9	7	10	14	4	4	1	9	0	16	34
13	11	2	6	1	3	2	4	6	2	6	5	2	9	13	9	6	7	16	1	9	1	16	9	36	72

- Mathematical (Dynamical) problems solving Methods I
 - February March 2013
 - I2 student teachers
 - e-learning course
- https://edu.ukf.sk/
- IO chapters with different materials
 - Eucledian eggs
 - Mathematics in Art
 - Calculus in Geogebra applets
 - Dynamical simulations

- CPD courses for practicing teachers, financial support PRIMAS
 - I. Elementary mathematics
 - 12 teachers
 - the course has started in November 2012
 - Tesselation of the plane practical, Geometry in the playground
 - > 2. Primary school mathematics
 - > 25 teachers
 - the course has started in November 2012
 - Geogebra constructions, triangels, tesselation of the plane using geogebra, Euclidean eggs, Dynamical simulation

• 3. Secondary school mathematics

- 8 teachers
- the course has started in February 2013
- Dynamical simulation, Geogebra constructions, open problems
- 4. Science teachers course about using GIS and GPS in education
- 8 teachers
- the course has started in February 2013
- GeoCaching, using GPS, geometry in the nature
- FINAL PAPERS and POSTERS conference 2 July 2013

- Lecture for PhD Students and Young Teachers and Researchers 24 October 2012
 - Sona Ceretkova
- Slovak National Mathematics Conference contribution the project and materials introduction to teachers and colleagues, 22 – 24 November 2012 Nitra, Tatras
 - Sona Ceretkova, Jarmila Novotna
- CERME 8 conference contribution February 2013
 - Jan Benacka and Jan Sunderlik

- Dissemination in 2013
- Nitra Mathematics Conference 27 June 2013
- Conference of PhD Students and Young Researchers
 18 September 2013









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- Představují část rozsáhlého výzkumu, kde jsou hledány obpovedl na tyto otázky:
 ak kácí "hednoti" úbhy, které jsou jim předloženy? Podle jakých kritérii? Používaj "spontánně" růzmé nebo podobné klasifikace? Jak jejich názory souvisi s jejich úprozuměním matematice? apod.
 Jsou šácí schopní rozeznat, sformulovat a vysvětilt podobnosti a rozdhy mezi úlohami? Jsou souschoní zívalný souvisí se stejným matematickým molty souvisí se stejným matematickým vyzdál měn?
 Jsou schopní vytvořit vstah mezi zadáními a řešeními tak, že najdou společnou "strukturu"?

The last states

- team contest in The Netherlands, Germany, Belgium
- I7 years old pupils, teams 3-4 pupils
- One day 8 hours
- One report about investigation of an open problem
- Assingnment in English prepared by FI in Utrecht
- translated to Slovak
- 2011 40 pupils, 2 towns, 12 teams + PhD students
- 2012 I 17 pupils, 4 towns, 27 teams
- Assessment team work
- The best SK team is going to participate on ceremony for 10 best teams from NL, D, B in March in Utrecht



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