International Symposium Elementary Mathematics Teaching

SEMT '11

Prague, Czech Republic Charles University in Prague, Faculty of Education Club of Friends of Didactics of Mathematics at Charles University August 21 - 26, 2011

Programme

<u>Sunday Augu</u>	<u>st 21, 2011</u>	
13:00-16:00	Registration	
16:00-16:30	Opening	Aula
16:30-18:00	S. Vinner: The elementary teacher – beyond mathematical knowledge	Aula
Monday Augu	ust 22, 2011	
9:00-10:30	<u>Workshops</u>	
	A1 - E. Levenson, R. Barkai: Explanations, justifications, and proofs in	
	elementary school	R003
	A2 – A. Jančařík: Mathematics Ludus	VS
	A3 – MP. Chopin, J. Novotná: Theory of didactical situations (TDS) and its	
	relationships with mathematics education	Aula
11:00-12:30	E. Wittmann: Early mathematical education: A plea for mathematically	
	founded conceptions	Aula
14:00-14:30	A. Savard: Elementary teachers do not teach through mathematics	R003
	N. Panorkou: A phenomenographic study on students' experiences of	
	dimension	VS
	E. Levenson: Exploring the roles of the teacher in promoting collective	
	mathematical creativity	Aula
14:30-15:00	A. Chestnut: Using pedagogical content scaffolds evidenced in transcripts to	
	measure teacher knowledge	R003
	E. Swoboda: Axis symmetry as an epistemological obstacle	VS
	J. Bureš, R. Havlíčková, J. Novotná: Analysis of a young teacher's	
	communication with pupils in a mathematical environment fostering	
	combinatorial reasoning (a case study)	Aula
15:00-15:30	T. Marcinek, E. Partová: Measures of mathematical knowledge for teaching:	
	Issues of adaptation of a US developed instrument for the use in the Slovak	
	Republic	R003
	J. Kloboučková: Cube building in primary school geometry	VS
	MP. Chopin: Didactic time and heterogeneities in mathematics teaching:	
	How teachers deal with clock, knowledge and pupils in their practice	Aula
16:00-17:30	<u>Workshops</u>	
	B1 – B. Hodgson, C. Lajoie, L. Poirier: The mathematical preparation of	
	elementary school teachers: facing the challenge from three complementary	
	perspectives	D 003
	B2 - M. Kaslová: The role of photography in the teaching of maths	KUUJ VS
	B3 – S. Hershkovitz, M. Tabach: Instruction and technology	IT
19:00-22:00	Welcome party	11

Tuesday August 23, 2011 9:00-10:30 Workshops

9:00-10:30	<u>Workshops</u> B1 – B. Hodgson, C. Lajoie, L. Poirier: The mathematical preparation of elementary school teachers: facing the challenge from three complementary	
	perspectives B2 - M. Kaslová: The role of photography in the teaching of maths B3 - S. Hershkovitz, M. Tabach: Instruction and technology	R003 VS IT
11:00-12:30	<i>M. Bartolini-Bussi</i> : Towards a cultural analysis of the content to be taught in elementary school	Aula
14:00-14:30	 <i>E. Jagoda</i>: Symmetry in a static and dynamic environment <i>P. Guidoni, M. Mellone, C. Minichini, M. Serpico</i>: Towards a "resonance" comprehension of the polynomial representation of numbers <i>M. Kaslová, C. Marchini</i>: The mathematical knowledge needed for teaching 	R003 VS
14:30-15:00	to five year old pupils <i>I. Peled, S. Anat</i> : Prospective teachers experiencing the power of intuitive knowledge involving percentages <i>A. Seifert</i> : Improving mathematical knowledge through targeted instruction:	Aula R003
	focusing on data utilization to improve teaching and learning <i>P. Tsamir, D. Tirosh, R. Barkai, M. Tabach, E. Levenson</i> : Investigating the effects of an intervention on the geometric knowledge of abused and neglected kindergarten children	VS
15:00-15:30	<i>M.M. Capraro, R.M. Capraro, R Rosli, SY. Han, A. Harbaugh, P. L. Moch:</i> Teacher educator strategies for improving preservice teachers' knowledge of fractions	R003
	J. Young-Loveridge, J. Mills: The challenge for teachers of helping students acquire a range of strategies to solve addition and subtraction problems V.V. Cifarelli, S. P. Morge, D. Pugalee, T. Goodson-Espy: Examining the math content and pedagogical knowledge of pre-service teachers: How	VS
16:00-17:30	Katelyn and Matthew made sense of students' problems <u>Workshops</u> A1 - E. Levenson, R. Barkai: Explanations, justifications, and proofs in elementary school A2 - A. Jančařík: Mathematics Ludus A3 - MP. Chopin, J. Novotná: Theory of didactical situations (TDS) and its relationships with mathematics education	Aula R003 VS Aula
Wednesday A	1945 24 2011	
9:00-9:30	 E. Polotskaia, A. Savard, V. Freiman: A "fairy" tale to represent a holistic approach to additive word problem solving P. Vighi, C. Marchini: A-priori analysis as a revealing tool of 'new enrolled' teachers' mathematical knowledge – A case study M. Tabach: Promoting technology integration among prospective teachers of mathematica 	R003 VS
9:30-10:00	<i>M. Hejný</i> : The process of discovery in teaching focusing on building schemes <i>H. Nováková, J. Novotná</i> : A priori analysis in theory and teachers' practice <i>R. Cabassut</i> : Mathematical knowledge for teaching modelling in elementary	R003 VS
10:00-10:30	school <i>C. Mathews, H. Venkat, J. du Plessis</i> : To be or not to be: Examples and non- examples of patterns <i>L. Kasmer, E. Billings</i> : Prediction questions in the elementary classroom <i>P. Divišente, N. Stablibertic</i> , Compating and Lange of Statistics and and the stable of the stab	Aula R003 VS
11:00-11:30	 B. Divisova, N. Stehlikova: Geometric problems effectively solvable without algebraic calculations A. Hošpesová: Mosaics as substantial learning environment in geometry J. van Bommel: Preparing student teachers with MKT 	Aula R003 VS

	<i>C. Sheets, V.V. Cifarelli</i> : Developing instructional sequences in pre-service K-2 elementary mathematics teacher education	Aula
11:30-12:00	X. Xistouri, D. Pitta-Pantazi: The structure of elementary students' ability in	D 000
	geometric transformations: The case of translation	R003
	teaching	VS
	understanding central tendency measures: a multilevel statistical analysis	Aula
14:00	Excursion	
Thursday Aug	<u>gust 25, 2011</u>	
9:00-10:30	Workshops	
	A1 – E. Levenson, R. Barkai: Explanations, justifications, and proofs in	D002
	$\Delta 2 = A Iančařík:$ Mathematics Ludus	KUUJ VS
	$A_2 = A$. Suncaria: Mathematics Euclus $A_3 = M - P$ Chopin J Novotná: Theory of didactical situations (TDS) and its	V D
	relationships with mathematics education	Aula
11:00-12:30	D. Sprangler: Facilitating knowledge development and refinement in	
	elementary school teachers	Aula
14:00-15:30	Posters	
16:00-17:30	<u>Workshops</u> B1 – <i>B. Hodgson, C. Lajoie, L. Poirier</i> : The mathematical preparation of elementary school teachers: facing the challenge from three complementary perspectives B2 – <i>M. Kaslová</i> : The role of photography in the teaching of maths B3 – <i>S. Hershkovitz, M. Tabach</i> : Instruction and technology	R003 VS IT
Friday Augus	<u>et 26, 2011</u>	
9:00-9:30	Chun-ip Fung: A practitioner's encounter with the mathematical knowledge	
	needed for teaching in elementary school	R003
	M. Bardelli: The Pedagogical Content Knowledge of primary mathematics	TIC
	L Lang H Hawthorne F Sakon A Pata P Schoon: Examining the effects	VS
	of a K-3 mathematics formative assessment System	Aula
9:30-10:00	<i>J. Cooper</i> : Mathematicians teaching elementary school teachers - A case	Tulu
	study	R003
	D. Jirotková: Generic models in geometry	VS
	M.L. Niess, D.K. Pugalee: Assessing K-8 teachers' knowledge for teaching	
	with technology: A complex problem needing a comprehensive assessment	
	system	Aula
10:00-10:30	<i>w. Klassen</i> : The impact of an innovative field based component within the methode source for preservice teachers at LIPC Observer.	DAAA
	maintennances methods course for preservice reachers at UDC Okanagan M Pytlak: Early algebraic reasoning - discovering regularities on the primary	KUU3
	school level	VS
10:45-12:00	Closing session	ւյ Հոյե
		nula

Social events

Monday August 22, 2011 19:00-22:00 Welcome party

Wednesday August 24, 201114:00Excursion