## Day One: Thursday, August 19, 2010

Paper Pre	sentation, Session 1 (13.30 – 15.00)
TSG 1-1	<b>TSG106</b> : Maarten Dolk, Francien Garssen & An te Selle
	Teachers' Repertoire to Promote the Development of Mathematical Knowledge through Problem
	Solving
	TSG107: Fang Junbin
	Three Factors of Effective Inquiry Teaching: Critical Analysis of a Mathematics Lesson Fragment in
	Lesson Study
	TSG117: Shiqi Li
	The Structural Characteristics in Teaching: A Case of Geometry Lesson in China
	TSG143: Wanty Widjaja & Maarten Dolk
	Building, Supporting and Enhancing Teachers' Capacity to Foster Mathematics Learning: Insights from
	Indonesian Classroom
TSG 1-2	TSG104: Boon Liang Chua & Celia Hoyles
100 1-2	Teacher and Student Choices of Generalising Strategies: A Tale of Two Views?
	TSG108: Hajime Hayakawa & Ayumi Nomura
	Educational Effects of Creating Word Problems through Inquiry-Based Learning
	TSG116: Leung King Man
	To Foster and Strengthen Student's Cognitive Skills and Mathematical Ability by Using Interactive
	Tasks and Project Activity in Measures and Statistics Strands
	TSG130: Wee Tiong Seah
	The Third Wave: Australian Students' Perspectives of Effective Mathematics Learning in Primary
T00 4 0	Schools
TSG 1-3	TSG124: Melissa Ng Mei Paoo
	Effects of Math Talk on the Mathematical Problem Solving (MPS) Process in Elementary Mathematics
	Education
1	TSG129: Tetsuro Sasaki
	The Expression Gap between Usual Teaching and Mathematical Activity
	TSG135: Soon Wan Mei Amanda
	The Teaching of Problems in Modelling Contexts to Engineering Undergraduates
	TSG138: Nisara Suthisung & Kiat Sangaroon
	The Relation between Real World and Mathematical World through the Process of Abstraction
TOO	Focusing on Perception, Action and Reflection
TSG 2	TSG202: Sarah K. Bleiler & Denisse R. Thompson
	Dimensions of Mathematics Understanding: A Longitudinal Analysis of Primary Students' Achievement
	in the United States
	TSG210: Rumiati & Robert (Bob) Wright
	Using One-To-One Videotaped Interview-based Assessment to Capture Indonesian Children's
	Strategies in Solving Addition and Subtraction Problems in the Range 1-100
	TSG211: Denisse R. Thompson, Berinderjeet Kaur & Sarah K. Bleiler
	Using a Multi-dimensional Approach to Understanding to Assess Primary Students' Mathematical
	Knowledge
	TSG213: Ka Lok Wong & Carol Lo Cheng
	Students' Understanding of Parallel Lines and Related Angle Properties in Dynamic Geometry
	Environment
TSG 3	TSG300: Ma. Louise Antonette N. De Las Peñas & Debbie Marie Bautista
	On Dynamic Geometry Technology and Student Centered Learning
	TSG301: Chew Cheng Meng & Lim Chap Sam
	Developing Primary Pupils' Geometric Thinking through Phase-based Instruction Using the
	Geometer's Sketchpad
	TSG304: Ho Foo Him & Leong Yew Hoong
	Using Dynamic Geometry Software in Teaching Geometry Proof
	TSG305: Seiya Negami & Yoshiaki Hoshino
	Designing and Development of "gm for kids", Software Assisting Children to Learn Graph Theory

	TSG412: Peter Sullivan
TSG 4	The Processes and Principles Underpinning the Development of the New Australian Mathematics
	Curriculum
	TSG411: Yusuke Shinno
	Identifying Conceptual Change Situations in Mathematics Curricular Content: on the Development
	from Rational to Real Numbers
	TSG413: Tomoko Yanagimoto, Yuki Seo & Ken-ichi Iwase
	A Study on Making Knot Theory into a Curriculum
-	TSG414: Bo Yu, Keqiang Xu & Changgen Pei
	Research on the Implementation and Investigation of the National New Mathematics Curriculum in
	Southwest China
TSG 5-1	TSG502: Mark Applebaum
	Development of Critical Thinking in Pre-service Mathematics Teachers
	TSG510: Toshihiro Imai
	The Effects of Monitoring about Overcoming Fixation in Mathematical Problem-solving on College
	Students of Prospective Elementary School Teachers in Japan
	TSG520: Maitree Inprasitha, Auijit Pattanajak & Narumol Inprasitha
	Mathematics Internships Student' Collaboratively Reflection about Kku Mathematics Teacher
	Education Program
TSG 5-2	TSG505: Chiew Chin Mon & Lim Chap Sam
	Challenges and Insights Gained in Conducting Lesson Study: A Case in Malaysia
	TSG507: Susie Groves & Brian Doig
	Adapting and Implementing Japanese Lesson Study: Some Affordances and Constraints
	TSG511: Thanya Kadroon & Maitree Inprasitha
	Investigating Teachers 'Values about Teaching Mathematics in Classrooms Implemented Lesson
	Study and Open Approach as a Teaching Approach: A Thai Experience
	TSG517: Ewe Gnoh Ong, Chap Sam Lim & Munirah Ghazali
	Changes in Mathematics Teachers' Questioning Techniques through the Lesson Study Process
TSG 6	TSG602: Tomoko Itoh
	Precondition to Good Understanding of Probability in Math Classes at Junior High School
	TSG603: Peggy Lynch
	Mathematisation: The Ability of Irish Students to Transfer Mathematics from the Classroom to Realistic
-	Situations
	TSG606: Keiichi Nishimura, Isao Shimada, Hiroshi Makino, Yoshihiro Kubo, Kazuhiro Igarashi,
	Shinichiro Matsumoto, Masanori Ushiba, Akira Shimazaki, Yasufumi Hisanaga & Eizo Nagasaki
	A Study on Connecting Mathematics with the Real World
	TSG608: Teoh Boon Tat, Warabhorn Preechaporn & Leong Chee Kin
	Problem-Based Learning the 4 Core Areas (PBL4C) in the Search of Excellence in Mathematics
	Education

Paper Presentation, Session 2 (15.30 – 17.00)	
TSG 1-1	TSG133: Keiichi Shigematsu, Yoshio Katsumi & Nobuhiko Ueda
	Metacognition: the Role of the "Inner Teacher"(8) Changes in Quality of Students' Metacognition by
	Teacher's Comments Using Red Pencil on Students' Journal Writing
	TSG137: Ariya Suriyon & Kiat Sangaroon
	1st Grade Students' Metacognitive Strategies in Open-Ended Problem Solving Situation: Evidence
	from Students' Written Work
	TSG139: Goro Takai
	Research on Individual and Collective Perspective in Mathematical Problem Solving Lesson:
	Relationship among Metacognitive Activity, Beliefs, and Norms
	TSG149: Hitoshi Takahashi
	Relationships between an Elementary School Student's Making Mathematical Discovery and
	Indwelling in Learning Proportion
TSG 1-2	TSG120: Yuki Masuda
	Students' Difficulties in Representing and Interpreting Radian for Angle Measure

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	TSG145: Toyoko Yamanoshita
	How to Nurture the Recognition of Quantities to Confront Real Problems in Elementary Schools
	TSG134: Pu Shuping
	Fraction Instruction in China under the Perspective of HPM
	TSG142: Wang Xiong & Fang Yanping
	The Classroom-based Analysis as a Key Reflection on the Approaches to Equivalent Fractions
TSG 1-3	TSG101: Maxima J. Acelajado
	Blended e-Learning: A Strategy for Improving the Mathematics Achievement of Students in a Bridging
	Program
	TSG132: Nagisa Shibuya
	Relationship between Teaching and Learning in Grade 6 Lessons in the Process of the Adaptation of
	Substantial Learning Environment in Zambia
	TSG147: Yan Zhu
	Mathematics Teaching in Hong Kong Secondary Schools from 1990s to 2000s
	TSG119: Naomichi Makinae
	The Origin of Lesson Study in Japan
TSG 2	TSG205: Pang Wai-Kit Alwyn & Jaguthsing Dindyal
100 2	Students' Errors in Mathematics at the Junior College Level
	TSG208: Matthias Ludwig & Binyan Xu
	Blockages and Barriers in Students Work on Modelling Tasks
	TSG212: Yung Wing Yee Angela
	A Hong Kong Mathematics Teacher's Mindset for Alternative Assessment Via the Concerns-Based
	Adoption Model
TSG 3	TSG302: Kyeong-Sik Choi
	Learning Mathematics in Student-centered Class Using GeoGebra
	TSG303: Hajime Hayakawa, Tadayuki Ishida & Hiroshi Okano
	Effectiveness of a RME Java Program for Increasing Calculation Skills Motivation
	TSG306: Toshimitsu Miyamoto
	Effective Knowledge Sharing Based on Symbiotic Computing and Its Application to Networked
	Cooperative Group Learning for Arithmetical Education
TSG 4	TSG401: Yoshitaka Abe
	Curriculum Constructing Principle for Fostering Mathematical Literacy
	TSG402: Takuya Baba
	Socially Open-End Approach and Critical Mathematics Education
	TSG407: Toshikazu Ikeda, Max Stephens & Yoshihisa Tanaka
	Mathematical Modelling Giving Meaning to Mathematics: A Case Study of Japanese Textbooks
	Seventy Years Ago
TSG 5-1	TSG501: Miyo Akita & Noboru Saito
	Study on Improving the Class Practice Power for Students of University of Education: Developing an
	Evaluation Sheet and Its Application
	TSG515: Ida Ah Chee Mok
	Researching Mathematics Learning Task Events: A Project for Mathematics Student Teachers in Hong
	Kong
	TSG522: Koji Takahashi
	Analysis on the Issues around the Preservice Teacher Training Curriculum in Primary Math Education in Cambodia
	TSG523: Wun Thiam Yew & Sharifah Norul Akmar Syed Zamri
T00 5 6	Preservice Teachers' Knowledge of Area Formulae: A Case Study
TSG 5-2	TSG512: Berinderjeet Kaur
	The EPMT Project: A Harbinger for Teachers' Meaningful Production of Pedagogical Knowledge
	TSG525: Aida I. Yap
	Developing Mathematics Teaching Practice through Collaborative Lesson Research and Development
	Developing Mathematics Teaching Practice through Collaborative Lesson Research and Development <b>TSG514</b> : Yunpeng Ma & Dongchen Zhao
	Developing Mathematics Teaching Practice through Collaborative Lesson Research and Development TSG514: Yunpeng Ma & Dongchen Zhao Similarities and Differences between "Excellent" Lessons: A Comparative Analysis of Two Exemplary
	Developing Mathematics Teaching Practice through Collaborative Lesson Research and Development <b>TSG514</b> : Yunpeng Ma & Dongchen Zhao

TSG 6	TSG601: Hajime Sato
	Mt. Fuji and Mathematics
	TSG604: Marita S. Magat
	Functionality of Teaching and Learning Plane Trigonometry
	TSG605: Gerardo C. Malab
	Effectiveness and Acceptability of the Malabsky's Formula in Solving Thermometric Problems
	TSG607: Kazuhisa Takagi
	A Close Look at Poisson's Theorem and the Birthday Problem

## Day Three: Saturday, August 21, 2010

Paper Pre	sentation, Session 3 (13.30 – 15.00)
<b>T</b> 00 ( )	TSG114: Hiroyuki Kumakura & Hideyuki Umeda
TSG 1-1	Teaching Students to Appreciate the Significance of Learning Trigonometry: Focusing on the
	Introduction
	TSG111: Yuka Koizumi
	An Investigation of Teacher's Questioning in the Mathematics Classrooms in Germany and Japan
	TSG118: Rachel Lui Ka Wai
	Mathematics Classrooms in Berlin and Hong Kong: Exploratory vs. Directive Teaching
	TSG144: Lihua Xu, David Clarke & May Ee Vivien Wan
	Meta-discursive Rules and the Introduction of New Content in Mathematics Classrooms in Seoul,
	Shanghai and Tokyo
T00 4 0	TSG103: Suttharat Boonlerts & Maitree Inprasitha
TSG 1-2	How to Teach Multiplication In Thailand, Japan And Singapore: A Comparison of Textbooks
	TSG127: Suwarnnee Plianram & Maitree Inprasitha
	Using Japanese Mathematics Textbooks for Lesson Study in Thai Context
	TSG113: Liew Kee Kor, Chap Sam Lim & Saw Fen Tan
	The Third Wave: What Malaysian Chinese Primary School Pupils Value in an Effective Mathematics
	Lesson: A Pilot Study
	TSG115: Huk Yuen Law, Ngai Ying Wong & Ngar Yin Louis Lee
	The Third Wave: Regional and Cross-regional Studies of Values in Effective Mathematics Education:
	Hong Kong
<b>TOO</b> 4 0	TSG102: Anastasios (Tasos) Barkatsas & Jiesi Guo
TSG 1-3	Investigating Student-related Factors as Predictors of Hong Kong Year 8 Students' Mathematics
	Achievement in the 2007 Trends in Mathematics and Science Study [TIMSS]
	TSG105: Rui Ding & Ngai-Ying Wong
	Relationship between Mathematics Classroom Environment and Students' Performance under the
	Chinese Curriculum Reform
	TSG136: Sun Xiaotian
	Some Daily and Typical Features That Related to the High Achievements of Chinese Students in
	Mathematics
	TSG146: Xiaoxia Zhang & Yeping Li
	Chinese Student Computation Skills in the Context of School Mathematics Reform
TOC 4 4	TSG109: Kazuhito Imai
TSG 1-4	Forming the Principles of the Introductory Setting Design of Creating Students' Mathematical Activity in
	the Classroom
	TSG112: Yanin Kongthip, Maitree Inprasitha & Sasitorn Pasjuso
	Communicating Students' Ideas by Gestures in Open Approach
	TSG128: Noboru Saito & Miyo Akita
	Performance of the Mountain Climbing Learning Method to Activate Students' Creative Thinking and
	Its Effects
	TSG150: Kawissara Sansanoh, Maitree Inprasitha & Noboru Saito
	Study of Creativity in Mathematics Learning: For Students of Primary School

<b>TOO</b> 0	TSG203: Boey Kok Leong & Jaguthsing Dindyal
TSG 2	Singapore Students' Trend in the Performance in Mathematics by Gender in TIMSS 2003 and 2007
	TSG204: Kimiho Chino, Taro Fujita, Kotaro Komatsu, Tomohiko Makino, Takeshi Miyakawa, Mikio
	Miyazaki, Naohito Mizutani, Hiroyuki Nakagawa, Shintaro Otsuka & Yosuke Tsujiyama
	An Assessment Framework for Students' Abilities/Competencies in Proving
	TSG206: Chunlian Jiang
	Hierarchical Levels of Speed Word Problems: A Study Conducted in Singapore and China
	TSG406: Koay Phong Lee & Ho Siew Yin
TSG 4	Fraction Division in the Singapore Mathematics Curriculum
	TSG410: Nanae Matsuo
	Geometrical Education for Preschool Children and Early Graders in Primary School: Focus on
	Disembedding of Shapes
	TSG409: Lee Ngan Hoe
	The Role and Nature of Curriculum Frameworks in Mathematics Curriculum Development Initiatives
	TSG405: Keiko Hino
	Researching and Conducting Mathematics Lessons: An Attempt to Adopt Lesson Study in a Graduate
	Course
TSG 5-1	TSG506: Gonzalez Orlando & Masami Isoda
130 5-1	Survey on Japanese Senior High School Teachers' Statistical Literacy: Focusing on Variability
	TSG508: Rongjin Huang, Xuemei Chen, Yeping Li & Jianyue Zhang
	Chinese High School Teachers' Knowledge for Teaching Algebra: An Exploratory Study
	TSG526: Qiao-Ping Zhang & Ngai-Ying Wong
	Mathematics Teachers' Professional Knowledge, Beliefs and Their Implications on Their Teaching
	TSG527: Ofelia B. Chua & Meriam V. Dela Cruz
	Characteristics and Behavioral Patterns of Teachers in Relation to the Performance of Engineering
	Students in Differential Calculus at TIP Manila
TSG 5-2	TSG516: Ng Kit Ee Dawn
	Collective Reasoning and Sense Making Processes During a Real-world Mathematical Project
	TSG518: Ann O'Shea & David Wraith
	A Problem Solving Course for Out-of-field Mathematics Teachers
	TSG524: Toshiaki Yabe & Tatsuya Mizoguchi
	Process of Problem Solving Learning in New Era: Focus on "Academic Skills"

Paper Pre	sentation, Session 4 (15.30 – 17.00)
	TSG131: Supot Seebut, Utith Inprasit & Hathaikarn Wattanatnweekul
TSG 1-1	A Collaborative Problem Solving in Mathematics Courses
	TSG140: Sampan Thinwiangthong, Suladda Loipha & Sasitorn Pasjuso
	Triad Feedback: Unit of Analysis of Small-group Mathematical Communication to Understand
	Mathematical Learning Process
	TSG148: Aihui Peng & Mikaela Nyroos
	Differences and Similarities of Different Group Students' Values in Effective Mathematics Lessons
	TSG110: Wasukree Jaijan, Suladda Loipha & Nongkhran Sasom
	Exploring Thai Students' Mathematical Connections among Content Areas in Open-Ended Problem
	Situation
<b>TOO</b> 4 0	TSG141: Yosuke Tsujiyama
TSG 1-2	Argumentative Aspects of Geometrical Proofs: An Approach to the Notion of Proving in School
	Mathematics
	TSG123: Mikio Miyazaki & Taro Fujita
	Students' Understanding of the Structure of Proof: Why Do Students Accept a Proof with Logical
	Circularity?
	TSG125: Masakazu Okazaki
	Development of Reasoning Ability towards Proof Using Seventh Grade Plane Geometry
	TSG121: Shinichiro Matsumoto
TSG 1-3	Statistical Way of Thinking of First Graders

	TSG122: Akio Matsuzaki & Takashi Kawakami
	Situation Models Reformulation in Mathematical Modelling: The Case of Modelling Tasks Based on
	Real Situations for Elementary School Pupils
	TSG126: Oyunaa Purevdorj
	Transformation of Mathematics Subject Matter Knowledge into Classroom Teaching: A Case Study
	TSG201: Cesar B. Bermundo & Alex B. Bermundo
TSG 2	Test Checker and Item Analyzer with Statistics
	TSG207: Leung Chi Keung Eddie, Cai Jinfa & Tong Wai Shan Peggy
	Is Attribution a Component of Metacognition in Mathematics? A Validation Study
	TSG209: Shintaro Otsuka
	An Analysis of Factors in the Difficulties in Explanation of False Statements: Focusing on Learner's
	Interpretations of Proposition
<b>TOO</b> 4	TSG403: Anna Mei-Yan Chan, Ngai-Ying Wong & Chi-Chung Lam
TSG 4	In Search of Effective Mathematics Teaching and Learning in Hong Kong Primary Schools: The Impact
	of Spiral Bianshi Mathematics Curriculum on Students' Cognitive and Affective Outcomes
	TSG404: Tung-Ping Cheung & Shi-Pui Kwan
	Mouhefanggai: a Page in Ancient Chinese Mathematics
	TSG408: Lai Mun Yee
	An Exploratory Study into Chinese and English Speaking Children's Visual Perception
<b>TOO F</b> (	TSG503: Narumon Changsri, Maitree Inprasitha & Kanokporn Changtong
TSG 5-1	A Study of Teachers' Perceived Beliefs Regarding Teaching Practice
	TSG509: Xingfeng Huang, Jinglei Yang, Bingxing Tang, Lingmei Gong & Zhong Tian
	An Experienced Chinese Teacher's Strategies in Teaching Mathematics Ground on Curriculum
	Innovation: a Case of Translation on Quadratic Function
	TSG519: Shaileigh Page & Julie Clark
	How Do Teachers' Experiences Shape Pedagogical Decisions in the Primary Mathematics
	Classroom?
TSG 5-2	TSG504: Yuelan Chen & Qian Tian
156 5-2	On the Feasibility of Teachers' University Curriculum from Teaching Practice Perspective
	TSG513: Issic K. C. Leung, Hee-Chan Lew & Tae Soen Cheon
	Comparison on the Students' Ability of Presenting Counter Examples and Prospective Teachers' Ability
	of Treating Counter Examples: A Pilot Study in Korea and Hong Kong
	TSG521: Akihiko Takahashi & Brian Fu
	Replicating Exemplary Practices in Mathematics Education among APEC Economies