

WALS

9th WORLD ASSOCIATION OF LESSON STUDIES
INTERNATIONAL CONFERENCE 2015

"Lesson Study for Improvement of Classroom Quality"

24 - 27 NOVEMBER 2015 | KHONKAEN, THAILAND

CONFERENCE ABSTRACTS

ORGANISED BY



WALS 2015

Lesson Study for Improvement of Classroom Quality

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Anna Offset, Khon Kaen, THAILAND

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WALS 2015: Lesson study for improvement of classroom quality :: First call for papers: 15 December 2014

Welcome to the official website of WALS International Conference 2015

November 24-26, 2015

Khon Kaen University, Thailand



The **World Association of Lesson Studies (WALS)** aims to promote and advance the research and practices focused on *Lesson Studies* in order to improve the quality of teaching and learning. The structure for this conference involving **Keynote Speakers, Paper presentations Symposium presentations, Workshops, Poster presentation and School Visits**. It is really a worldwide international event for researchers, educators, school teachers, policy makers and other scholars to share their knowledge among each other.

Introducing Lesson Study into Thai schools has influenced not only the improvement of teaching practice, but also improvement of the system of teacher education. A number of major changes have occurred during the last ten years since the introduction of Lesson Study and the Open Approach in 2002 by Center for Research in Mathematics Education. It has a made a great contribution to improving mathematics education in Thailand. In 2013, there are 60 project schools using Lesson Study and Open Approach. Moreover, the center has shared its knowledge through APEC Lesson Study Project of APEC HRDWG since 2006, which so far 19 APEC member economies have been participating.

Khon Kaen University is 15 minutes by car (10 km) from Khon Kaen airport which is an hour's flight from Don Mueang and Suvarnabhumi airports, Bangkok. A variety of accommodation ranging from university lodges to 4 star hotels can be found in downtown Khon Kaen. We have 2 campus demonstration schools in Khon Kaen University and it takes about 30 minutes to visit our pioneer Lesson Study project school in the Khon Kaen suburbs. Some attractions in the area are the famous Dinosaur Museum in Phu Wiang (87 km) and the



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excavation site at Phu Kum Khao, Kalasin (118 km). It is about 200 km (a 3 hour drive) from Khon Kaen University to Vientiane, Laos PDR. It is also possible to cross the border to Siem Reap, Cambodia in 8 hours or fly back to Bangkok for a connecting flight to Siem Reap.

I am very pleased that Thailand is the official host for this conference and to have the opportunity to welcome all participants from every country. I am very much looking forward to seeing you at WALs 2015 in Khon Kaen and I am sure that your participation will contribute to the success of the conference.

Maitree Inprasitha, Ph.D., Chairperson
WALS 2015 Organizing Committee
Faculty of Education, Khon Kaen University

Organizations: Center for Research in Mathematics Education (CRME), Faculty of Education, Khon Kaen University, Institute for Research and Development in Teaching Profession for ASEAN (RDTP ASEAN) and Society of Mathematics Education (TSMEd)

WALS

WORLD ASSOCIATION OF LESSON STUDIES INTERNATIONAL CONFERENCE 2015

“ Lesson Study for Improvement of Classroom Quality ”



and
APEC - Khon Kaen
International Symposium 2015

24 - 27 NOVEMBER 2015
FACULTY OF EDUCATION
KHON KAEN UNIVERSITY, THAILAND

Lesson Study for Improvement of Classroom Quality:

- WALS 2015 aims to promote and advance the research and practices focused on Lesson Studies in order to improve the quality of teaching and learning.
- Join our keynote & plenary sessions, paper presentations, symposium presentations, workshops, poster presentation and school visits.
- Learn and share with more than 300 papers from researchers, educators, school teachers, policy makers and other scholars.

Keynote Speakers:



Akihiko Takahashi
DePaul University, United States
24 November, 10:00 - 11:00



Wee Tiong Seah
University of Melbourne, Australia
26 November, 9:00 - 10:00



Maitree Inprasitha
Khon Kaen University, Thailand
25 November, 9:00 - 10:00

Open Classes:



Akihiko Takahashi
DePaul University, United States
Mathematics class for Prathomsuksa 6 (Grade 6)
20 November, 10:00 - 11:30



Masahiko Sakamoto
Junior High School attached University of Tsukuba, Japan
Mathematics class for Matthayomsuksa 1 (Grade 7)
25 November, 15:00 - 16:30



Nobuaki Kawasaki
High School attached University of Tsukuba, Japan
Disaster study class for senior high school (Grade 10-12)
26 November, 15:00 - 16:30

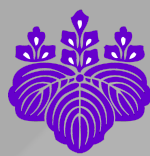
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TS Thailand Society of
Mathematics Education
MEd 2013





WALS 2015

Keynote Speakers



Akihiko Takahashi

DePaul University, United States

"Collaborative Lesson Research: Maximizing the Impact of Lesson Study"

Mathematics educator Dr. Akihiko Takahashi is an Associate Professor of mathematics education at DePaul University in the United States and a Specially-Appointed Professor at Tokyo Gakugei University in Tokyo Japan. He has served as Visiting Professor at National Institute of Education in Singapore, National Science University Malaysia, and Khon Kaen University in Thailand. At DePaul University he teaches mathematics teaching and learning, and mathematics for prospective teachers and practicing teachers. He also provides workshops and seminars for practicing teachers using ideas from the U.S. and Asian countries. Since April 2011 he has been working with Phil Daro to lead a team to develop digital learning program to address CCSS-M (<http://www.edweek.org/media/pearsonfoundationreleasegates.pdf>).

He was an elementary teacher in Japan for nearly 20 years, teaching self-contained classes in grades 1-6, before becoming an educator of mathematics teachers. During his elementary teaching career, he was nationally active in mathematics lesson study and mentored 200 pre-service teachers. He co-authored the best-selling Japanese elementary textbook series, Mathematics for Elementary School, which has been translated into English and is available from Global Education Resources. He received his Ph.D. from the University of Illinois at Urbana-Champaign; his dissertation research focused on internet use in mathematics education.



Maitree Inprasitha

Khon Kaen University, Thailand

"Lesson Study incorporating Open Approach: Two practices in Community of Practices to improve Quality of Classroom"

Maitree Inprasitha is an assistant professor for Mathematics Education Program at the Faculty of Education, Khon Kaen University, Thailand. He holds Ph.D. in Mathematics Education from the University of Tsukuba, Japan and has long experiences in studying Japanese lesson study for more



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than 15 years. His main research focus and publications revolve in Mathematics Education and teaching style of Lesson Study and Open Approach. These could make him being well-known as the first group of Thailand's educators on implementing this issue to develop mathematics teaching and learning. He has been invited to be a visiting researcher at Naruto University of Education in 2005 and at the University of Tsukuba in 2007.

He has been overseeing the APEC Lesson Study series since 2006 until present. 19 APEC member economies have been participating in this project and created their Lesson Study community in APEC.

He was an IPC for EARCOME in 2007-2013 and Advisory board in 2015. He hosted EARCOME 6 in Phuket, Thailand in 2013. In 2015, he is a chief editor of Mathematics Education Book Series 3: **Lesson Study: Challenge in Mathematics Education**. He is currently an IPC of ICMI Study 23: **Primary Mathematics Study on Whole Number**.

At national level, he has been overseeing many national projects implementing lesson study in schools in many parts of the country. The first lesson study project school with collaboration with Khon Kaen University coaching by him will celebrate her 10 years of experiences in implementing lesson study in Thailand. He established the Center for Research in Mathematics Education, the first center in Thailand and this center becomes a part of National Center of Excellence in Mathematics. And he also established Institute for Research and Development in Teaching Profession for ASEAN (IRDTP ASEAN) in 2014.

He has been regularly invited to be an invited speaker and moderator for international conference especially among APEC countries.



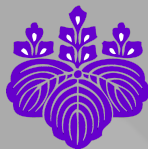
Wee Tiong Seah

University of Melbourne, Australia

"Socio-cultural Aspects of Classroom Implementations of Lesson Study"

Wee Tiong Seah is an Associate Professor in Mathematics Education at the Melbourne Graduate School of Education, University of Melbourne, Australia. He had earlier served in Monash University after leaving the secondary classroom as a teacher of mathematics and trainer of mathematics Olympiad teams. Between 2007 and 2009, Wee Tiong was part of an Expert Advisory and Research Group which advised the Australian Commonwealth government on mathematics education matters. Since 2014, he has been an External Examiner for the Chinese University of Hong Kong's MEEd program. In the period 2009 – 2011, Wee Tiong oversaw the setting up of Monash University's offshore PhD program in Singapore. He is also no stranger to Khon Kaen University, for which he was an External PhD Supervisor. In addition, Wee Tiong was External Consultant in 2005-2007 to the APEC Lesson Study project that was based at Khon Kaen University. He has also been assessor of such research grant bodies as The Netherland's 'National Programme for Educational Research' grant and South Africa's National Research Foundation. Since 2013, he has served on the International Advisory Board of the 'Mathematics Education and Society' group. Wee Tiong was one of three overseas invitational speakers at the 2014 First Chinese Conference of Mathematics Education, amongst his other keynote speaking commitments. On an ongoing basis, he is member of the Editorial Boards of 5 mathematics education research journals, including the 'International Journal of Science and Mathematics Education'.

Wee Tiong is passionate about the socio-cultural aspects of mathematics learning and teaching. His current research interest relates to what are valued in mathematics education and how these affect the quality of mathematics learning and teaching in schools and in the wider communities. This has led Wee Tiong to conceptualise and lead the 18-nation 'The Third Wave' Project. He has an entry in the 2014 'Encyclopaedia of Mathematics Education'. He was also invited to co-author for the 'Second International Handbook of Mathematics Education', as well as to co-edit a 2012 special thematic issue of the ZDM journal focussing on 'values in mathematics education'. More generally, Wee Tiong is also author or co-author of more than 100 research publications since 1999.



Paper Presentations: PP3

25 November @16.30-18.00

Code	Presenter	Co-Author(s)	Title of Paper	Institution(s)	Country	Room
PP3-1218-1	Zulkarnaen	Mohamad Nur, Budi Jatmiko	Hypothetical Model of Learning in Order to Improve Learning Outcomes and Scientific Creativity of Junior High School Students	Mulawarman University/Surabaya State University	Indonesia	1218
PP3-1218-2	George Chileya	Edward Tindi, Kazuyoshi Nakai	Impact of Lesson Study in Zambia: How Practice of Lesson Study by Teachers Influence Their Lessons and Learner Performance	Ministry of Education, Science, Vocational Training and Early Education	Zambia	1218
PP3-1218-3	Tippawan Nuntrakune		Using Lesson Study to Explore Innovative ORIGO Stepping Stone Mathematics Pedagogies	ORIGO Education	Thailand	1218
PP3-1254-1	Takuya Kanazu	Masami Matoba	Transcript- based Lesson Analysis: a Case Study of Professional Teacher Development in Japan	Tokaigakuen University	Japan	1254
PP3-1254-2	Hironori Sasaki	Yuka Kawasaki	A Study on the Reflections of Student Teachers Analyzing the Descriptions of Their Journals during Teaching Practice	Chugougakuen University/Kure National Institute of Technology	Japan	1254
PP3-1254-3	Sudatip Hancherngchai	Sampan Thinwiangthong	Mathematics Pre-Service Teachers' Pedagogical Content Knowledge in Lesson Study	Faculty of Education, Khon Kaen University	Thailand	1254
PP3-1255-1	Makoto Ota	Masakazu Okazaki	Relationship of the Mercenary Own Learning and Learning in Mathematics Learning: Learn Math by Taking Advantage of RPDCA Cycle	Tokaigakuen University	Japan	1255
PP3-1255-2	Charlotte Krog Skott	Hanne Møller	Planning for Learning – Using Lesson Study as a Frame for Danish and Mathematics Teaching	UCC	Denmark	1255
PP3-1255-3	Michelo Kaliba	Kazuyuki Kambara	How Problem Solving Method Is Treated By Mathematics Teachers In Zambia: Toward Effective Lesson Study Practice	Ministry of Education, Science, Vocational Training and Early Education/ Mukogawa Woman's University	Zambia & Japan	1255
PP3-1343-1	Soh Poh Suan	Gek Meng Wendy Low, Yee Fhang Fann Kang, Kim Keong Tan	Responsible Decision Making: A Lesson Study Approach	Clementi Town Secondary School, Ministry of Education	Singapore	1343

Paper Presentations: PP3

25 November @16.30-18.00

Code	Presenter	Co-Author(s)	Title of Paper	Institution(s)	Country	Room
PP3-1343-2	Saliema Iqbal	Maria Rovena Raymund, Shaihba Md Sidek, Shermin Pek Jia Ying, Rita Tay Geok Kim, Edmund Chen Kaixiang	Using The Question Matrix to Generate Higher-Order Thinking	Woodlands Ring Primary School, Ministry of Education	Singapore	1343
PP3-1343-3	Magda Elabbar		Using Lesson Study to Forge New Landscapes for Learning in Higher Education in War Torn Libya	East Anglia University	United Kingdom	1343
PP3-1373-1	Viston Zacharia Machiko	Takuya Baba	Critical Factors in Lesson Study for Improving Lesson Quality in Zambia	Ministry of Education, Science, Vocational Training and Early Education/ Hiroshima University	Zambia & Japan	1373
PP3-1373-2	Marlon Ebaegu	Max Stephens	Implementing A Culturally Embedded Approach to Lesson Study in Two Philippine Schools: Going Beyond Copyism	The University of Melbourne	Australia	1373
PP3-1373-3	Estelle Goh		Enhancing Intellectual Climate Using The Bloom Taxonomy On Discussion Board	Tampines primary school	Singapore	1373
PP3-1412-1	Maria J. Servan	Soto Encarnación, Noemí Peña Trapero	Lesson Study As A Tool For Rebuilding Teachers' Practical Thinking: A Bridge Between Espoused Theories And Theories-In-Use.	University of Malaga	Spain	1412
PP3-1412-2	Rahimah Razali	Nurul Asyikin Mohamed Amin	What's on The Menu?	Tampines Primary School	Singapore	1412
PP3-1412-3	Mee Eng Cheng		GPS to Mathematical Problem Solving	Princess Elizabeth Primary school	Singapore	1412
PP3-1413-1	Charity Kolala Chamasese	Mitsue Arai	The Use of Key Question towards the Meaningful Mathematics Lessons in Zambia	Ministry of Education, Science, Vocational Training and Early Education/ Hiroshima University	Zambia & Japan	1413

Paper Presentations: PP3

25 November @16.30-18.00

Code	Presenter	Co-Author(s)	Title of Paper	Institution(s)	Country	Room
PP3-1413-2	Pimpaka Intaros	Maitree Inprasitha, Sampan Thinwiangthong	Investigating Students' Ways of Thinking and Understanding in Problem Solving Mathematics Classroom	Faculty of Education, Khon Kaen University	Thailand	1413
PP3-1413-3	Ui Hock CHEAH		Designing Instruction for Quality Mathematics Classrooms: A Case Study	Institute of Teacher Education, Penang Campus	Malaysia	1413
PP3-1414-1	John Elliott		Teachers' Narrative Accounts of their Professional Learning through Lesson Study: a Thematic and Discursive Analysis	University of East Anglia	United Kingdom	1414
PP3-1414-2	Akihiko Takahashi	Fatma Al-Hassan	Use of LessonNote, a tablet-based application, for nurturing lesson study leaders-A case from the IMPULS- Qatar University project-	DePaul University/ Qatar University	United States/ Qatar	1414
PP3-1414-3	Keith Wood		Teacher Research to Develop 21st Century Teaching Practices and Learning Outcomes	Universiti Brunei Darussalam	Brunei Darussalam	1414
PP3-1449-1	Siaw Wen TANG	Kwee Hua LIM, Siew Hoon KWEK, Yu MIN, Yee Pin LIM, Swee Hong CHIA, Kim Huay CHENG, Peiru TAN, Soon Yeow WONG	Empowering Teachers Through Lesson Study For Quality Teaching	Ministry of Education	Singapore	1449
PP3-1449-2	Novri Youla Kandowangko	Lilan Dama	Efforts To Prepare Teacher Candidates Through The Lesson Study Patterns	Gorontalo state university	Indonesia	1449
PP3-1449-3	Alan Pillay	Low Choon Siong, Rezuan Bin Kassim, Alwiyah Binte Abdul Aziz	Responding to Truth Statements: Teaching Reading Comprehension in an Upper Primary EL Classroom~ A Case Study from Singapore	Evergreen Primary School	Singapore	1449

Paper Presentations: PP3

25 November @16.30-18.00

Code	Presenter	Co-Author(s)	Title of Paper	Institution(s)	Country	Room
PP3-1450-1	Noorazam binti Ahmad Nadzir	Azmi bin Mohamad, Suzalin binti Zaini Sooria, Ilda Salwani binti Ameer Hamza, Shamsul Kamal bin Abdullah, Ahmad Tarmimi bin Mukhtar	The Impact Of Continuous Professional Development (CPD) Towards The Enhancement Of The Quality Of Teachers In Port Dickson District	District Education Department	Malaysia	1450
PP3-1450-2	Allan Canonigo		Using The Lens Of Appreciative Inquiry To Describe And Create Images Of Teacher Experience	University of the Philippines	Philippines	1450
PP3-1450-3	Hiroki Goto	Mayumi Isobe	Study about the Construction of a School Support System for Foreign Students - from the Point of View of the Curriculum Management-	Aichi University of Education,	Japan	1450
PP3-1460-1	Pornpaka Chamnanwong	Kongsak Thathong, Toshinobu Hatanaka	The Assessment of Workshop on Construction and Implementation Science Lesson Plans of Primary School Teachers	Faculty of Education, KKU /Toho University	Thailand & Japan	1460
PP3-1460-2	Toshinobu Hatanaka	Pornpaka Chamnanwong, Kongsak Thathong	Identifying Difficulties of Elementary Science Teachers in Applying Science Inquiry Teaching during Lesson Study in Thailand	Toho Univerity/ Khon Kaen University	Japan & Thailand	1460
PP3-1460-3	Djamilah Bondan Widjajanti	Endang Listyani, Elly Arliani, Rosita Kusumawati, Retno Subekti	A Reflection of the Lesson Study Activity in Statistics Class: The Importance of a Contextual Introduction	Yogyakarta State University	Indonesia	1460

WALS 2015

Lesson Study for Improvement of Classroom Quality

Concurrent Session

Paper Presentations

PP 3

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Keywords:
knowledgeable
others, lesson study,
teacher professional
learning

PP3-1449-2

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Keywords:
teacher candidates,
Lesson Study

PP3-1449-3

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enhanced capacity in integrating the use of the online portal in teaching and learning of Chinese language, and gained efficacy in designing ICT-integrated lesson.

The qualitative research methods are employed, and the subjects of the study are Chinese language teachers participating in the projects who have little experience in using the online portal in teaching and learning of Chinese language. Main sources of data include lesson plans, teaching materials created for research lessons by participating teachers, post-lesson observation discussions, teachers' reflection and teachers' survey.

The paper will describe the role and involvement of knowledgeable others in the projects, examine the professional knowledge gained by teachers involved in the projects, and to what extent the knowledgeable others help in empowering teachers with enhanced professional capacity.

Efforts to Prepare Teacher Candidates through the Lesson Study Patterns

The purpose of this research was revealed effort to prepare teacher candidates through lesson study pattern on the practice field experience program (PPL) in the department of biology education.

This classroom action research conducted since February - May 2015. Target / research subjects are students who programmed course PPL 1 in the department of biology education, Faculty of Science, Gorontalo State University. Data were collected observation data of teaching skill, portofolio of design learning and video documentation of learning. Instruments include observation sheets and evaluation portofolio learning. Data observation, evaluation portofolio and video evidence was analyzed by descriptive qualitative study.

Results of this research is through the implementation of lesson study on PPL-1 program, the candidate biology teachers are able to develop pedagogical competence in designing learning, able to implement the learning process biology, and be able to reflect on themselves as well. Biology teacher candidates actively and consciously observe the learning experience that has been done before, analyzed and acted make improvements on biological learning process at a later stage.

Responding to Truth Statements: Teaching Reading Comprehension in an Upper Primary EL Classroom

In the Assessment Guidelines and Ideas for English Language (MOE, 2013), one of the learning outcomes is that "students are able to apply critical reading by focusing on implied meaning, higher-order thinking, judgement and evaluation".

The main aim of this study is to investigate the use of a Thinking Routine, Claim-Support-Clarify, to develop pupils' reasoning skills for answering questions based on a text. The routine will provide a structure in applying



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CERTIFICATE OF ATTENDANCE

This is to verify that

Novri Youla Kandowangko

has been a presenter of
Oral Presentation

In the WALS International Conference 2015
held at the Faculty of Education, Khon Kaen University, Thailand
between 24-27 November 2015

Maitree Inprasitha, Ph.D.
Chairperson, WALS 2015 Organizing Committee
Dean, Faculty of Education, Khon Kaen University

The logo for the World Association of Lesson Studies International Conference 2015, featuring the letters 'WALS' in a bold, green, sans-serif font. The 'W' and 'A' are connected, and the 'L' and 'S' are also connected. The logo is set against a white background with a green diagonal line to its left.

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