

**APEC - Tsukuba
International Conference on Innovative Teaching Mathematics
through Lesson Study (II)
- Focusing on Mathematical Thinking -**

December 2 – December 7, 2006, Tokyo & Sapporo, JAPAN

Objective

Mathematical Thinking is necessary ability for science, technology, economical life and development. With Lesson Study approaches, the project aims to:

- 1) Collaboratively share the ideas and ways of mathematical thinking which is necessary for science, technology, economical life and development on the APEC member economies, and
- 2) Collaboratively develop the teaching approaches on mathematical thinking through Lesson Study among the APEC member economies.

For these aims, APEC-Tsukuba International Conference on Innovative Teaching Mathematics through Lesson Study (II) - Focusing on Mathematical Thinking - will be organized in order to share ideas and ways of mathematical thinking on curriculum level and teaching level.

Precise information will be seen on the website:
<http://www.criced.tsukuba.ac.jp/math/apec/>

Background

The APEC project “Collaborative Studies on Innovations for Teaching and Learning Mathematics in Different Cultures (II) - Lesson Study focusing on Mathematical Thinking-” is accepted in May 2006 and approved in October 10, 2006. Mathematical Thinking is a necessary ability for science, technology, economical life and development. The conference in Tokyo & Sapporo is a part of the project. On the part of project, the specialists dispatched from economies will share the framework of Lesson Study at the Conference. After the conference, specialists engaging in Lesson Study and present their result at the meeting at Thailand in August 2007.

Results of past meetings are on the website:
<http://www.criced.tsukuba.ac.jp/math/apec2006/>

Participants

The project and the meetings are planned for all APEC economies' welfare. The project itself has been carried out by the specialists (experts) from economies who participated in the past two meetings at Tokyo in last January 2006 and Khon Kaen in last June 2006, and at the same time it opens for new specialists who are recommended by each economy. In the case of economies recommending new specialists, please consider following conditions of specialists for developing the products of the project.

Specialist;

- is expected to be a researcher of mathematics education,
- is working in the Ministry of Education or academic institutions including universities and teachers' colleges,
- has an experience of research in classroom at elementary school level,
- knows and feels interested in Lesson Study movements,
- is interested in the conference,
- will engage in Lesson Study and develop teacher education program in each economy in the project.
- must participate in both meetings in Japan and Thailand
- will present his/her reports both in Japan and Thailand

For the beneficiary of all economy members, the organizing committee will consider the ways to support one specialist from each economy by the APEC grant or the grant from Japan but the committee has to say that there is a limitation. Depending on the APEC policy, the travel cost of one specialist from each APEC eligible member economy (Chile, China, Indonesia, Malaysia, Mexico, Papua New Guinea, Peru, Philippines, Russia, Thailand, and Vietnam) should be supported by APEC grant. Economies that can dispatch by the self-grant will be recommended using self-grants for their participations.

Please use Appendix A for recommendations from economies and send back to Project Overseer, Masami ISODA (apec@criced.tsukuba.ac.jp) until October 30, 2006.

Roles of Specialists

Specialists contribute their reports about following questions before the conference.

Question 1: How mathematical thinking is defined in your curriculum documents and your lesson?

Question 2: What is a key window for considering mathematical thinking?

Question 3: How can we develop mathematical thinking through the lesson?

The project is approved for all APEC welfare. The specialists supported by the APEC grant or the Japanese grant will be requested to present their report. In case more than two specialists in an economy expected to contribute, organizing committee recommends them integrating their report into one report.

The precise descriptions of questions and ways of contribution will be seen on the website:

<http://www.criced.tsukuba.ac.jp/math/apec2007/>

In the conference, all participants will contribute to develop and share the collaborative framework for Lesson Study to develop mathematical thinking.

Structure and Schedule

The conference has following components; First component is two open symposiums; on December 3 and 4, second component is a workshop on December 5-7, and third component is Lesson Study Meetings; on December 2, 5 and 6.

Tentative Schedule is followings;

Schedule of APEC - Tsukuba meetings (Titles of lectures are tentative.)

December 1 FRI: Arrival day.

(Evening: “Symposium to develop excellent students in Mathematics” in Japanese)

December 2 SAT:

(Morning: continuing in Japanese)

Afternoon: APEC-Tsukuba Lesson Study Meeting for sharing cases to develop mathematical thinking. (Elementary School of University of Tsukuba)

December 3 SUN:

APEC-Tsukuba International Conference: Tokyo Open Symposium with lectures: Opening, keynote lectures, lectures and a panel.

December 4 MON:

Morning: moving to Sapporo

Afternoon: APEC-Tsukuba International Conference

Sapporo Open symposium: One Lecture and a panel

December 5 TUE and 6 WED:

APEC-Tsukuba International Conference

Workshop (morning) and Lesson Study (afternoon) in Elementary School

December 7 THU:

APEC-Tsukuba International Conference

Workshop and Closing

Evening: Moving to Tokyo

December 8 FRI: Departure day

Important days

October 11, 2006: Announcement to member economies

Contact URL: <http://www.criced.tsukuba.ac.jp/math/apec2007>

October 30, 2006: Dead line of the nomination of delegates from member economies

Contact address: apec@criced.tsukuba.ac.jp

October 31, 2006: Invitation, Information of Trip and Announcement to participants

November 24, 2006: Dead line of the submission of paper

November 27, 2006: All Papers for Discussion will be on the website:

November 30, 2006: Final Announcement will be on the website:

December 1 FRI - 2 SAT Morning: Arrival days of Participants

Venues of APEC - Tsukuba Conference in Tokyo and Sapporo

The meetings will be held following places:

December 1: JICA INSTITUTE FOR INTERNATIONAL COOPERATION

<http://www.jica.go.jp/english/contact/ific/index.html>

(Included accommodation in Tokyo)

December 2: Attached Schools, University of Tsukuba at Tokyo

<http://www.gakko.otsuka.tsukuba.ac.jp/map.jpg>

December 3: JICA INSTITUTE FOR INTERNATIONAL COOPERATION

<http://www.jica.go.jp/english/contact/ific/index.html>

December 4-8: JICA SAPPORO INTERNATIONAL CENTER

<http://www.jica.go.jp/branch/hics/jimusho/hics.html#map>

(Included accommodation in Sapporo)

APEC Project Overseers

Suladda Loipha, Khon Kaen University, Thailand
Maitree Inprasitha, Khon Kaen University, Thailand
Masami ISODA, University of Tsukuba, Japan
Shizumi Shimizu, University of Tsukuba, Japan

Conference Host: University of Tsukuba
Organized by Ministry of Education, Japan
Supported by Japan International Cooperation Agency (JICA)
Hokkaido University of Education
Japan Society of Mathematical Education (JSME)
Japan Society of Science Education (JSSE)
Board of Education, Sapporo City

Local Organizing Committee

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Appendix 1

Specialists (Experts) from the Economy

Please fill and send it back through the economy (government) by e-mail.

* Specialists will be already participated specialists of the both meetings on last January in Tokyo and last July in Thailand (see Appendix 2), or new persons who are recommended by the economy.

**The specialist written on 1) will be supported by the APEC project grant or the Japanese grant. From the project side, the specialists of the last meetings will be recommended for the continuation of the project.

***There is no limitation of the number of specialists who are recommended by each economy with self-grant.

1)

Names (First Middle Last)			
Title		Economy	
Affiliation (Institution)			
e-mail			
Tel/Fax			

2)

Names (First Middle Last)			
Title		Economy	
Affiliation (Institution)			
e-mail			
Tel/Fax			

3)

Names (First Middle Last)			
Title		Economy	
Affiliation (Institution)			
e-mail			
Tel/Fax			

Appendix 2

LIST of Specialists (Experts)
on the both meetings at Tokyo, last January and at Kohn Kaen, last June.

NAME	economy	AFFILIATION	E-mail
Max Stephens	Australia	University of Melbourne	m.stephens@unimelb.edu.au
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