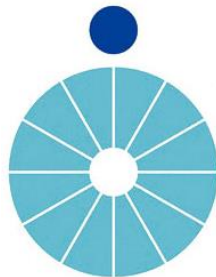




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## **APEC Lesson Study Project**

**2006 – 2017**

**Proposed by  
Office of the Higher Education Commission,  
Ministry of Education, Thailand and  
Ministry of Education, Culture, Sports, Science and Technology, Japan**

**Organized by  
Khon Kaen University, Thailand and  
University of Tsukuba, Japan**



## APEC Lesson Study Project 2006: Get Started

*“A Collaborative Study on Innovations for Teaching and Learning Mathematics in Different Cultures among the APEC Member Economies Project”* was proposed by Office of the Higher Education Commission, Ministry of Education, Thailand and Ministry of Education, Culture, Sports, Science and Technology, Japan in 2006. This project is an APEC Education Network (EDNET) project since 2006 until present that aims to improve the quality of education in mathematics through the use of Lesson Study.



## APEC Lesson Study Project 2006: Unique Cycle of Implementation

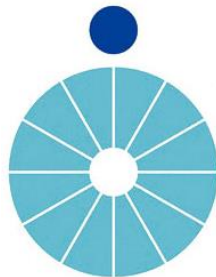
The goals of the project are to:

- 1) **Share the approaches** of Lesson Study for the method of the improving quality of education in general
- 2) **Collect and share videos and lesson plans** demonstrating good practices in mathematics
- 3) **Develop collaborative network on Lesson Study** among member economies and
- 4) Use Lesson Study approaches to **develop innovative teaching practices** in multiple areas, including: Mathematical Thinking, Mathematical Communication, Evaluation, Generalization.





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# APEC Lesson Study Project 2006: 2 Meetings Every Year

**APEC - TSUKUBA**

**International Conference 2006**



**Collaborative Studies on Innovations for Teaching and  
Learning Mathematics in Different Cultures**

**“Innovative Teaching Mathematics through Lesson Study”**

**15-20 January 2006**



**APEC-Khon Kaen International Symposium 2006**

**Collaborative Studies on Innovations for Teaching and**

**Learning Mathematics in Different Cultures**

**“Innovation and Good Practice for Teaching and Learning  
Mathematics through Lesson Study”**

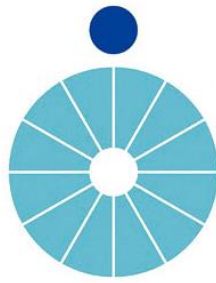


Keynote speakers and all specialists from participating economies presented an example of good practices using Lesson Study from the local schools they involved in this project.





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# APEC Lesson Study Project 2006: Develop Innovations from “Good Practices”



Specialists from participating economies presented their ideas on "good practices" by clarifying "what is good", "why it is good", and "how it is developed" with supplementary short videos.



Lesson Study meeting at the Elementary school attached to University of Tsukuba in Tokyo

Japanese teaching method was introduced to Thai teachers in the manner of a workshop on Lesson Study.



## APEC Lesson Study Project: Becoming Series of Projects

**First Series:** In 2006 – 2008, the project focused on *‘Innovative teaching mathematics through lesson study’*. This series were funded by APEC fund.

**Second Series:** In 2009 – 2011, it was self-fund project that focused on *‘Mathematics textbook, e-textbooks and education tools’*.

**Third Series:** In 2012 – 2014, it was APEC funded project that focused on *‘Emergency Preparedness Education’*.





## APEC Lesson Study Project 2015: Joint Conference with WALS

In 2015 the project focused on *‘developing education for future planning with mathematics and science based on the APEC lesson study community’*. In this year, it shows the great development of the project. In the second meeting in Khon Kaen, Thailand the two important conferences on Lesson Study between APEC lesson study project (since 2006) and World Association of Lesson Studies (WALS) conference have been jointed. There were 522 participants from 32 countries participated in these big events.



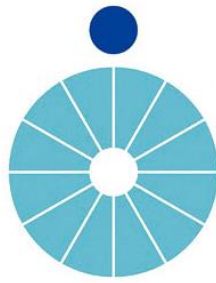
## APEC Lesson Study Project 2016 - 2018

The three-year projects aim to *produce innovative textbook in mathematics and science* on **Energy Efficiency (2016)**, with **Security (2017)** and with **Resiliency (2018)**.





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## APEC Lesson Study Project 2016: Started Cross-border Education

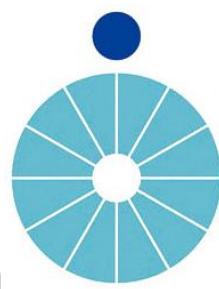
In 2016, the project focused on ‘**Innovation of mathematics education through lesson study challenges to energy efficiency on STEM and cross-border education**’.







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# Cross Border Between Thailand and Indonesia

## How much was spend for the electricity bill?

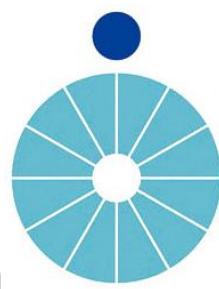


**Grade 9<sup>th</sup>**





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# Cross Border Between Thailand and Indonesia

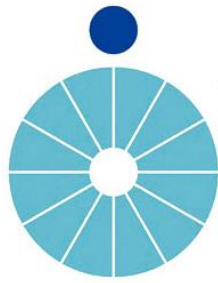
## How much was spend for the electricity bill?







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## APEC Lesson Study Project 2017

Innovation of Mathematics Education through **Lesson Study**  
**Textbook Development** for SDGs, STEM, and Energy by **Cross-border Education**

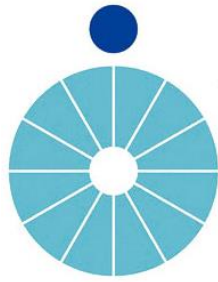
February 10 : Cross-border Lesson Study  
at the Affiliated Secondary School between **Thailand** and **Japan**







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## APEC Lesson Study Project 2006 – 2017: New Roles in ASEAN

# Institute for Research and Development in Teaching Profession for ASEAN

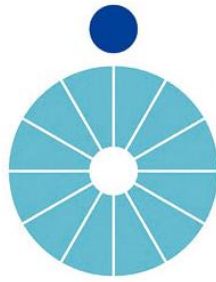


**24 August 2016**





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# APEC Lesson Study Project 2006 – 2017: New Roles in ASEAN

## Institute for Research and Development in Teaching Profession for ASEAN



**APEC Lesson Study Project 2016  
12-15 November 2016**