

The APEC Lesson Study Project: Strengthening Teaching Across the APEC Region
Alan Ginsburg
Lead Shepherd, APEC Human Resource Development Working Group
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It is an honor to give an opening address describing the importance of the international Lesson Study Project for strengthening teaching across APEC Economies. This project demonstrates that the 21st century is truly a world without borders. A world in which we can learn from each other and with each other to help ensure that all students receive a world class education. It is within the context of this new flat world that the APEC lesson study project directed by Masami Isoda and Maitree Inprasitha has supported teachers throughout the APEC region, from Asia, Australia, North America and South America, in becoming world class K-12 teachers of mathematics.

International assessments now identify the world's highest-performing nations in mathematics and other subjects. This information is useful, but to be truly valuable it is essential to identify the exemplary practices that contribute to why some systems do better than others. This process of understanding the successful practices underlying high-performing education systems and adapting these practices to one's own Economy is formally termed internationally benchmarking. Fundamentally, benchmarking is the practice of being humble enough to admit that someone else is better at doing something and wise enough to learn how to master and even surpass them at it.¹

International benchmarking offers many advantages including:

- Providing a mirror to analyze internal performance and practices from a broader perspective of other countries.
- Identifying successful practices of the highest performers for potential adoption or adaptation.
- Making explicit each other's underlying assumptions and approaches.
- Creating a world laboratory of experimentation for new ideas.

Masami Isoda and Maitree Inprasitha have been preeminent leaders within APEC in spearheading international benchmarking through lesson study. The APEC lesson study project is an excellent model for how international benchmarking should work. It is by far the single best example of the sustained transfer of exemplary practice among APEC members that I have seen as Chair of the Human Resource Development Group. It is important for other projects to understand the reasons for its success and its ability to replicate the model worldwide.

¹ APQC. Available February 2010 at <http://www.apqc.org/portal/apqc/site/?path=/services/custombenchmarking/index.html>

First, the APEC lesson study project concentrates on an important concern common to all APEC members, the quality of teachers and teaching. It recognizes what research shows – the quality of the teacher is the single most important factor in determining student learning. An example is the evidence from U.S. researchers looking at the range of student academic growth from having the most-effective to the least-effective teachers. Researchers calculate that the difference in achievement between students in classrooms taught by the highest-quality versus those taught by lowest-quality teachers for three consecutive years is 50 percentile points on standardized tests.²

Second, to improve the quality of teaching, the APEC project has focused on the research-based practice of lesson study. The practice of Lesson Study, which follows a continuous improvement process in teaching a topic, originated in Japan in the 19th century. Its purpose was to enable Japanese teachers, who had traditionally used individualized instruction, to acquire group instruction skills from their peers in western countries. Lesson Study is widely viewed as the foremost form of professional development in Japan and is credited with success in improving classroom practices within the Japanese school system. Now Western and other educational systems are benefitting from the Japanese experience, not only in mathematics but in other content domains. Indeed, Chinese Taipei is championing an APEC lesson study project in foreign language professional development that will be building a video library to train Eastern and Western teachers in the Asia Pacific region.

Third, this project has provided extensive training in the understanding, implementing and adapting of the lesson study practice. Unlike most APEC projects that are one-time seminars this project has sustained the effort to support continued international learning and transfer practice.

Fourth, APEC Lesson Study has made effective use of ICT in the form of videos on the APEC Wiki to enable teachers throughout APEC Economies to see good Japanese teaching of lessons on different topic. Each month thousands of educators view the APEC videos far more than could ever attend actual face-to-face presentations. The current set of videos on the APEC Wiki include: grade 3 multiplication algorithm, grade 5 area of the circle; grade 6 multiplying and division of fractions, and grade 11 interpreting the graph of the derivative of a function.

The ultimate success of the lesson study project should be measured in terms of its outcomes and on this criterion the Lesson Study project is also a clear winner. The APEC Lesson Study efforts have directly connected to new or expanded Lesson Study projects in Singapore, Thailand, the United States and Chile.

I also see that the upcoming two-day sessions will focus on assessments. This is an important topic especially for teachers. On a personal level, I recently had an article in the journal of the

² Sanders, W.L. and Rivers, J.C., "Cumulative and Residual Effects of Teachers on Future Student Academic Achievement," Knoxville, University of Tennessee Value-Added Research and Assessment Center, 1996.

one-million member American Federation of Teachers comparing mathematics assessment problems from the Massachusetts assessment, the highest U.S. performing state, with those from Hong Kong, the highest performer in the world on grade 4 TIMMS. The Massachusetts problems were not bad, but they involved fewer multi-step and open-ended problems that demanded understanding of the application of mathematics concepts to problem solving. My request to you over the next two days is to discuss whether there are mathematics assessments from your educational systems that could be placed on the APEC Wiki so that educators could see the assessments problems in different members Economies.

In conclusion, when I am asked to point to the accomplishments of APEC in education and why APEC, with its focus on trade and investment, needs a strong education component, I immediately point to the exemplary work of the Lesson Study project for APEC. This project has made a real contribution to the APEC Education Ministers goals of providing each student with a strong foundation in mathematics in preparation for 21st Century skills. It also is an exemplar project for the APEC inclusive growth agenda championed by its leaders. Students with well-developed teachers in mathematics do better in school, learn critical 21st Century skills, and are able to better participate in a 21st Century workforce that can be measured in higher earnings over a life-time.

Masami and Maitree probably did not know that their initial modest project would grow to be a centerpiece for APEC's work in education—but it is. I thank both the governments of Japan and Thailand and the Universities of Tsukuba and Khon Kaen for jointly supporting this worthy project.