

Masami Matoba & Mohammad Reza Sarkar Arani (2005) *Learning from Japanese Approach to Teachers' Professional Development: Can Jugyou Kenkyu Work in Other Countries?*, A paper presented at the 3<sup>rd</sup> International Conference on Comparative Education in Teacher Training, Organized by the Bulgarian Comparative Education Society, Sofia, Bulgaria, 18 – 22 April 2005.

## **Learning from Japanese Approach to Teachers' Professional Development: Can *Jugyou Kenkyu* Work in Other Countries?**

Matoba Masami  
*Professor, Nagoya University*

Sarkar Arani M. Reza  
*Postdoctoral Fellow, Nagoya University*

### **Abstract**

This paper tries to present a careful analysis of current trends and challenges to importing Japanese model of teachers' professional development. The objective is to examine what "we" can learn from Japanese approach to improving instruction, especially *Jugyou Kenkyu* (Lesson Study) as a collaborative research on the teaching-learning process. The intention is to clarify what we can learn from Japanese *Lesson Study* which is practiced in the United States and Iran's education context.

### **Introduction**

Recent Scholarship on teachers' professional development calls for change and suggests that one of the most important things for teachers' professional development is to do research into their own classrooms with their own students (Levin & Rock, 2003; Theissen, 2000; Smylie, 1995; Dean, 1991). According to Darling-Hammond and McLaughlin (1995), professional development today should provide "occasions for teachers to reflect critically on their practice and to fashion new knowledge and beliefs about content, pedagogy and learners" (p.597). Lieberman (1995) characterized effective professional development as that which is grounded in inquiry, reflection, and participant-driven experimentation, naming the role of teacher-researcher as an appropriate means. Rosaen and Schram (1997) suggested that future studies should look at the potential for shared inquiry among novice and experienced teachers to promote professional dialogue about teaching and learning and whether it results in greater learning experiences for both sets of teachers.

Teaching quality and teachers' professional development are closely tied to school activities and environment. In the *Jugyou Kenkyu* (Lesson Study) as a fundamental program in Japanese school-based in-service teacher training, teachers find opportunities

to reflect on many school and classroom problems that challenge them and develop their own responses.

Placed against the research cited above, the authors found that the contemporary situation of lesson study in Japan provides various opportunities for change and enriching classroom practices, for teachers' professional development and for improving school activities and environment (Matoba & Sarkar Arani, 2003).

Stigler who first time delivered lesson study in United States education context as an alternative approach to the improvement of classroom teaching, mentioned, the concept of lesson study seems simple and obvious: If you want to improve education, get teachers together to study the processes of teaching and learning in classrooms, and then devise to improve them. Remarkably, lesson study is not only a means of improving the skills and knowledge of teacher, but also a way to improve the knowledge base of the teaching profession (Fernandez & Yoshida, 2004).

### **Can Lesson Study Work in Other Countries?**

Many Japanese educational practices have been examined by American educators for possible application in the United States. This is one which we believe has been overlooked and yet has the potential for significant impact, especially as more schools become site-based managed.

According to Stigler and Hiebert(1999), Japan has succeeded in developing a system that not only develops teachers but also develops knowledge about teaching that is relevant to classroom and sharable among the members of the teaching profession. Not only do lesson study groups operate in individual schools, but the process of designing and critiquing research lessons is an integral part of the larger professional activity of both teachers and researchers. If you want to improve teaching, the most effective place to do so is in the context so a classroom lesson. If you start with lessons, the problem of how to apply research findings in the classroom disappears. The improvements are devised within the classroom in the first place (pp.111-126).

We believe that the examination of school-based in-service teacher training models in Japan, especially lesson study, offers a real possibility for the world teachers and school leaders to learn from their Japanese colleagues. So many of the educational practices cited for transfer by comparativists and others from Japan to the United States, such as cleaning classrooms, longer schools years, and serving lunches to younger peers are actually quite trivial. But the on-going professional development of teachers is a very important area which has real meaning.

We believe that the world teachers would respond positively to this kind of career professional development view as well. Who would like to begin?

### ***American Teachers' Case***

Recently a number of American researchers and educators have suggested that lesson study might be an incredibly beneficial approach to examine practice for teachers in the United States (Fernandez & Yoshida, 2004; Lewis, Perry & Hurd, 2004; Fernandea, Cannon & Chokshi, 2003; Lewis, 2002; Watanabe, 2002).

Lesson study piqued widespread interest in the late 1990s with the publication of Stigler & Hiebert's *The Teaching Gap*, which discussed the findings from the Third International Mathematics and Sciences Study (TIMSS) Video Comparison Study in an

anecdotal, narrative manner. Although lesson study did not directly come out of TIMSS, the authors introduced and popularized lesson study within its argumentative framework.

Stigler & Hiebert (1999) stated, “We are attracted to the Japanese notion of lesson study because it lays out a clear model for teacher learning and a clear set of principles or hypotheses about how teachers learn. Lesson study embodies a set of concrete steps that teachers can take, over time, to improve teaching. These steps may need to be modified to work in the United States. But we believe it is better to start with an explicit model, even if it needs revising, than with no model at all” (p.150).

To date, as Chokshi & Fernandez (2004) clarified we can identify over 70 groups engaged in lesson study in the United States, ranging from initiatives at the state level, to small groups of teachers from one school. These groups represent at least 28 states, span at least 90 school districts, include more than 230 schools, and involve at least 1200 teachers.

Preliminary evidence suggests that, at least at some sites, American teachers have found lesson study useful, in the words of one of the 5th and 6th grade teachers after her groups’ second lesson implementation: “I have learned so much from the lesson study experience and working cooperatively. This experience has helped me more than just having developed one lesson. It’s really more the lesson study process that’s helped me learn” (Fernandez, Cannon & Chokshi, 2003, p.177).

Another American teacher reflected: “In the past, a lot of us never really thought about two grades down the line and how what we were teaching affects them. And now we really are. We are looking at it from [the point of view of], This is what they learn in kindergarten. How does it carry through 8th grade?”(Lewis, 2002, p.19).

A American teacher describes her changed approach to lesson planning as a result of lesson study: “...[now] we think a lot more about the motivation for the lesson and making sure that the kids have the prior knowledge that they need before we teach each lesson.... Before we did lesson study we really didn’t think about what the student responses would be to the questions. When we posed a problem we never really thought about what the kids would come up with. It was ...Well, we hope they get the right answer and if we don’t then we will deal with it. Now we are really thinking about, well, what if this answer were to come up? How would we deal with it?” (Lewis, 2002, p.19).

Recent research identify a number of challenges to importing Japanese lesson study in the United States, including lack of shared, frugal curriculum, lack of good lesson examples on particular topics, the need for guidelines on how to observe, discuss, and revise lessons, and the lack of shared planning and observation time during the paid workday, to name but a few (Chokshi & Fernandez, 2004; Lewis, Perry & Hurd, 2004).

It is too soon to know whether lesson study will succeed in the United States, but the likelihood of the success would be increased by the participation of Japanese educators who could help to figure out the essential qualities of lesson study, the key experiences that make it useful to teachers, and the supporting conditions that enable it to be effective (Fernandez & Yoshida, 2004; Lewis, Perry & Hurd, 2004; Lewis, 2002).

### ***Iranian Teachers’ Case***

The lesson study brings an alternative perspectives and opportunity on teachers’ professional development, thus we try to transfer it to educational system context in Iran.

We have already started to share our experiences and collaborative activities as researcher and teacher.

We started to deliver lesson study as a project in title “Enrichment School Project” in 38 elementary schools in Tehran. We are importing it without so much grants and collaborative activities with Japanese school, universities and teachers, as American has already done it very well (see Lesson Study Research Group at Teachers College, Columbia University, <http://www.tc.columbia.edu/lessonstudy/>; & Lesson Study Group at Mills College, <http://lessonresearch.net/>). Iranian teachers embarking on lesson study have not had opportunity to work with Japanese educators and teachers. We also couldn't support so much our school in the project for transfer the Japanese approach to improving teaching and teachers' professional development because of no found and professional educators in this major. The authors have already published their research report, workshops documents and papers on Japanese lesson study to import it for the Iran education context (Matoba & Sarkar Arani, 2003; Sarkar Arani & Matoba, 2002).

Since we have delivered lesson study in Iran's education context, we could bring a new perspective on teachers' professional development in theory and practice. Iranian teachers may be for the first times learn during lesson study how they can learn from their classroom and collaborative activities. They recognized that they can learn from each other more in detail and in more useful way, especially, through self-reflection and group-reflection on their practices.

After a case study on lesson study a teacher said to the author: “we found lesson study very useful. As a teacher, you find immediate rewards from participate in lesson study. Because lesson study focuses on our daily works and real practices in classroom activities. We can learn more from our own research in school than educational researcher speech who is invited from out side of school” (taken from Teacher Interview, April 22, 2001).

A supervisor of teachers in a workshop on lesson study reflected: “In the past, we never really thought about how we could learn from each other. Sometimes we might be shy to ask to learn from each other. But, the lesson study can help us to enhance our experiences and make more effective cultural environment for collaborative activities and more professional development” (taken from Teacher Interview, May 24, 2002).

A teacher after the lesson study wrote for his supervisor: “I always thought that very important thing for students during mathematic lesson is to put emphasis on understanding the correct answer, but today during the observation of the class and after the group-reflection, I understood that we have to more emphasize on the understanding the problem first. I think we can learn about the process of students learning and teachers teaching during lesson study process” (taken from Teacher Interview, October 14, 2002).

To date, the authors have various experiences as importer of lesson study model to the Iran education context. Also teachers who participated in lesson study in Iran have various experiences based on own expectation and collaborative activities. We need more time to assess about the whole our activities during last two years in Tehran. But based on most of teachers' reports, the lesson study plays effective roles in improving teaching and learning process. They reflected, it is an interesting way to learn about teaching and bring valuable climate to school environment for improvement of school education and enrichment of classroom activities.

It is also too soon to judge that lesson study will succeed in Iran at all of schools. We need more supports, funds and cooperative projects with Japanese educators and

educational researchers, who could help us to figure out the quality of lesson study and adapt it to our very different educational system, teachers' quality and school culture.

### **Conclusion**

It seems to us that lesson study is attractive to Iran and American educators, practitioners and researchers, because it possesses many of the qualities that United States educators have already recommended for effective professional development. Specifically, lesson study is based on a long-term continuous improvement model and focuses on student learning, improvement of teaching and *collaborative* activities. To transfer lesson study to Iran, United States and other countries successfully, it is necessary to develop a culture for collaborative activities, shared professional culture, writing an instructional plan in detailed, developing a unit perspective on teaching-learning process, anticipating students' thinking, learning to observe classroom activities, and giving teachers a central role in developing these practices. Lesson study, in our view, is a cultural activity and focuses on teacher-directed learning and classroom-based professional development (Chokshi & Fernandez, 2004; Fernandez & Yoshida, 2004; Lewis, Perry, & Hurd, 2004; Matoba & Sarkar Arani, 2003; Watanabe, 2002).

From this study, it can be seen that the examination of school-based in-service teacher training models in Japan, especially lesson study offers a real possibility for other countries' teachers and school leaders to learn from their Japanese colleagues. Japanese teachers view professional development and enhancement of their teaching skills as a lifelong pursuit. They know that experience, self-study, critiques of their teaching by their colleagues and self-reflection are important parts of this process. Rather than "one-time" workshops on the latest educational topic they are engaged in a "long-term" process of self-reflection and development.

### **Acknowledgement**

This paper is based on work supported by the Japan Society for the Promotion of Science (JSPS). The authors would like to acknowledge the JSPS for the research support.

### **References:**

- Chokshi, S.; Fernandez, C. (2004) "Challenges to Importing Japanese Lesson Study: Concerns, Misconceptions, and Nuances", *Phi Delta Kappan*, Mar2004, 85, 7: 520-525.
- Darling-Hammond, L., & McLaughlin, M. L. (1995). "Policies that Support Professional Development in an Era of Reform", *Phi Delta Kappan*, 76, 8:587-604.
- Dean, J. (1991). *Professional Development in School*, Philadelphia: Open University Press.
- Fernandez, C. & Yoshida, M. (2004) *Lesson Study: A Japanese Approach to Improving Mathematics Teaching and Learning*, USA: Lawrence Erlbaum Associates.
- Fernandez, C.; Cannon, J. & Chokshi, S. (2003). "A U.S.–Japan Lesson Study Collaboration Reveals Critical Lenses for Examining Practice", *Journal of Teaching and Teacher Education*, 19, 2: 171-185.
- Fernandez, C. & Chokshi, S. (2002). "A Practical Guide to Translating Lesson Study for a U.S. Setting", *Phi Delta Kappan*, 84, 2: 128-134.
- Fernandez, C. (2002). "Learning from Japanese Approaches to Professional Development:

- The Case of Lesson Study”, *Journal of Teacher Education*, 53, 5: 393-405.
- Levin, B. B. & Rock, T. C. (2003) “The Effects of Collaborative Action Research on Preservice and Experienced Teacher Partners in Professional Development Schools”, *Journal of Teacher Education*, 54, 2:135-149.
- Lewis, C.; Perry, R. & Hurd, J. (2004) “A Deeper Look at Lesson Study”, *Journal of Educational Leadership*, February 2004, 18-22.
- Lewis, C. (2002). “Does Lesson Study Have a Future in The United States?”, *Nagoya Journal of Education and Human Development*, The Graduate School of Education and Human Development, Nagoya University, 1: 1-23.
- Lieberman, A. (1995). “Practices that Support Teacher Development: Transforming Conceptions of Professional Learning”, *Phi Delta Kappan*, 76, 8:591-596.
- Matoba M. & Sarkar Arani M. R. (2003) “Collaborative Research on the Relationship of School-Based In-service Teacher Training and Teachers’ Qualification: The Case of Transfer of *Jugyou Kenkyu* in Iran”, *Bulletin of the School of Education*, Nagoya University, 50, 1:145-162 (In Japanese).
- Matoba, M. et. al. (2000). “An Experimental Study of the Relationship of the Methods of Observation and the Observant Viewpoints in Classroom Research”, *Bulletin of the School of Education*, Nagoya University, 47, 1:141-160 (In Japanese).
- Rosaen, C. & Schram, P. (1997). “Professional Development for Beginning Teacher through Practical Inquiry”, *Educational Action Research*, 5, 2:255-281.
- Sarkar Arani, M. R. & Matoba, M. (2002). “School-Based In-Service Teacher Training in Japan: Perspectives on Teachers’ Professional Development”, *Bulletin of the Graduate School of Education and Human Development*, Nagoya University, 49, 1: 97-110.
- Smylie, M. A. (1995). “Teacher Learning in the Workplace-Implications for School Reform-”. In T. R. Guskey & M. Huberman (Eds.), *Professional Development in Education-New Paradigms & Practices-*, New York: Teachers College Press, 92-113.
- Stigler, J. (2002) “Redesigning Professional Development”, *Journal of Educational Leadership*, March 2004, 6-11.
- Stigler, J.W. & Hiebert, J. (1999). *The Teaching Gap: Best Ideas from the World’s Teachers for Improving Education in the Classroom*, New York: The Free Press.
- Thiessen, D. (2000). “A Skillful Start to a Teaching Career: A Matter of Developing Impactful Behaviors, Reflective Practices, or Professional Knowledge?”, *International Journal of Educational Research*, 33, 515-537.
- Watanabe, T. (2002). “Learning from Japanese Lesson Study”, *Educational Leadership*, 59, 6: 36-39.

