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Professional Development through Lesson Planning: Revealing a Critical Process of Lesson Study

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Abstract

Lesson Study is a teacher professional development approach in Japan. From the Japanese perspective, teaching is considered as a professional occupation with life-long goals to be accomplished, and therefore the aim of Lesson Study is not simply to improve teaching skills. The history of Lesson Study in Japan spans more than a century, as does the formal schooling system introduced in Japan during the Meiji era (Inagaki, 1995; Makinae, 2010). For Japanese educators, Lesson Study is like air, felt everywhere because it is implemented in everyday school activities, and so natural that it can be difficult to identify its critical and important features.

Since the TIMSS Video Study (Stigler, Gonzales, Kawanaka, Knoll, & Serrano, 1999) was brought to public attention, teaching activities in schools seem to have become one of the most interesting research targets in educational studies. The Teaching Gap (Stigler & Hiebert, 1999), particularly the seventh chapter titled "Japan's approach to the improvement of classroom teaching", which is based on Yoshida (1999) and is now available in Fernandez and Yoshida (2004), provoked enormous interest in Lesson Study as a process for professional development among non-Japanese educators and researchers. In fact, not only the United States but also other countries, including APEC countries, African nations and European countries, want to implement Lesson Study. Many mathematics teachers and teacher educators are now involved in Lesson Study, and many books and research papers have been written on various aspects of Lesson Study and the typical lesson pattern for Japanese structured problem-solving mathematics lessons (Groves & Doig, 2010; Hart, Alston, & Murata, 2011; Lewis, Perry, & Hurd, 2009; Lewis, Perry, & Murata, 2006; Perry & Lewis, 2009; Takahashi, 2006b; Watanabe, Takahashi, & Yoshida, 2008).

Outside Japan, however, it seems that many aspects of Lesson Study that are well understood by Japanese teachers have not transferred readily. For that transfer to happen, the Japanese model of lesson study needs to be more explicitly defined, including the beliefs and attitudes of Japanese teachers that underpin the process of Lesson Study.

There is no doubt that a lesson plan is a necessary component of Lesson Study. However, the process of lesson planning as a collaborative work among teachers is largely ignored by non-Japanese adopters of Lesson Study, possibly because the effort involved may be almost invisible with our attention going to its visible tip such as a live research lesson.

My talk tries to clarify the process of lesson planning and the role and function of the lesson plan based on the case studies conducted by the Project IMPULS at the Tokyo Gakugei University. I will discuss that the process of lesson planning and its role in Lesson Study, and conclude with recommendation for the role of Lesson Study in teacher professional development.

Keywords: Lesson Study, lesson planning, structured problem solving, task design, kyozaikenkyu

Note:

Project IMPLUS is a newly established project funded by the Ministry of Education, Culture, Sports, Science & Technology of Japan. IMPLUS stands for International Math-teacher Professionalization Using Lesson Study. The Project is housed in the Mathematics Education Department of Tokyo Gakugei University, Tokyo, Japan.

The purpose of the project is two-fold. First, as an international center of Lesson Study in mathematics, Tokyo Gakugei University and its network of laboratory schools will help teacher professionals from throughout the region learn about Lesson Study and will thereby prepare them to create Lesson Study systems in their own countries for long-term, independent educational improvement in mathematics teaching. Second, the project will conduct several research projects examining the mechanism of Japanese Lesson Study in order to maximize its impact on the schools in Japan.

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The Retrospect and Prospect of Teacher Education Curriculum in Japan

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I will discuss the retrospect and prospect of the teacher training curriculum in this paper. The teacher education system is closely related to the goal and curriculum of teacher training in Japan. There is an intangible hypothesis about teacher education. The quality of teacher training program directly leads to the quality of teacher's professional skills and spirit. It is the same rational as that the quality of teaching leads to the content of learning no matter what the student's quality and their subjective inner world are. For ordinary people, it is assumed that schools would be black boxes and the curriculum is teachers' proof as well as students' proof. However, we have to face the reality of the outcomes of the curriculum. There is no successful curriculum in order to attain the prescribed goals in this world.

I will discuss the teacher education curriculum in the three parts.

- 1) Brief history of teacher education system and curriculum after the war.
- 2) Contemporary reform of the system and the curriculum since 1990's.
- 3) Fundamental issues of teacher education curriculum in 2000's.

1. Brief Historical Overview of Teacher Education after the War

The reform of the contemporary teacher education has been developed in three periods after the war. 1) post-war democratic reforms from 1945 to 1957; 2) bureaucratic educational reform from 1958 to 1983, and 3) new reform movement from 1984. The values of educational reform in each period can be classified as the democratization, industrialization for social efficiency, and public demands for the educational privatization. The teacher education after the post war period is drastically changed from the normal school type to the liberal arts college type, which means the transition from authoritarian value to academic values. The authoritarian type teacher education is condemned by the American Educational mission and democratic leaders that it provided the skills based curriculum and non-liberal academic disciplines. So many criticisms and antagonisms against the normal school changed the system and curriculum of teacher education. In the place of practice-oriented teacher education, the academic university curriculum began to take the major position for teacher education. In the place of normal school, the ordinary university could provide teacher education course to become teachers. It was called "open system." Normal schools were elevated to the university level education.

The ideal of liberal arts college teacher education came from the United States. It was introduced to expel the Japanese militarism in education. The normal school was considered as one of the major cause of the Pacific War. It was successful enough to discard the authoritarian values in education. In the traditional authoritarian education, the Confucian ethics was so intensive that the teacher kept emphasizing docility and obedience in the classrooms. As far as it was concerned with the expelling Japanese militarism, the rise of liberal arts college teacher education was accepted. However, the openness of the teacher education became critical agenda for accomplishing the professionalization of teaching job after 1980s. In many teacher education colleges, the curriculum for teacher education has been taken the teeth out of pursuing the goal of teacher training. The anti-education attitude is so intensive and extensive in current teacher education institutes, in particular, in national university. That is a hidden curriculum but real curriculum.

The second period of teacher education after the war is characterized as bureaucratization. The rapid growth of industrialization and mass consumerism affected the trend of teacher education in 1960's and 1970's. The massive in-service teacher training centers were built to provide teachers

with advanced skills and professional expertise. A number of in-service programs for teachers were offered to teachers. No matter of how large the size of in-service teachers training programs are, the substantial development of professional skills is not expected. The lecturing and didactic are so common that no teachers would have been inspired by the senior educators' formal stories.

The third period is the time for upgrading the teachers' certificates by pro-longing and enriching the pre-service program, including the first year novice teacher program and a life-long teachers' in-service training, and the requirement of more credits of subject-based curriculum. In 1998, those up-grading teacher's certificates were institutionalized so that a number of teachers' colleges were obliged to follow the requirements of credits. Master's degree is the next agenda for qualifying teachers' certificates. However, those reforms are not consistent enough to standardize the teachers' certificates. There exist the hierarchical teachers' certificates in the schools. There are junior college(two years) graduate teachers in the schools, e.g., music, home economics, and other practical subjects. The upgrading the teachers' certificates are likely to lead to the complicated hierarchical structure among teachers' certificates.

There are other drives to upgrade teachers' certificates. The atmosphere surrounding teachers has been changed these days. The teachers are fragile to the social interference. The number of burning out teachers drastically increased, and so is the number of learning difficulties students. Many teachers have been suffering from the appearance of the "Monster" parents, who ego-centrally attack on schools. It is not possible to explain those phenomena only in terms of teachers' inability or lacking skills. Teachers have lost the parents' respect they used to have for a long time. So there are two reforms introduced in 2008 and 2009. One is the reform of institutionalization the new graduate school for teachers, the other is the reform of introducing the renewing the teachers' certificates. The new graduate school is called "Kyoshoku Daigakuin," which was introduced for upgrading the teachers' authority. The program of renewing teachers' certificate is called "Menkyo Koshin-sei." The arguments over those reforms are massive but institutionalized. Those reforms are neither practical nor substantive. The intention of those reforms is to return the teachers' authority by inflating their certificates.

2. The features of contemporary curriculum reform for teacher education: Explicit and hidden curriculum for teachers

I will present the content of teacher education curriculum on the basis of credits for teachers' certificates in new system. The credit requirements for elementary school teaching certificates are basically as follows:

- 1) The goal of teaching job (foundation for teaching jobs and role): 2
- 2) Foundations of Education(Educational ideals and history, developmental psychology, learning process, educational system) : 6
- 3) Curriculum and instruction (Curriculum making, subject teaching, moral education, extra curriculum, information technology): 22; 12 (for middle schools)
- 4) Guidance and counseling: 4
- 5) Project based Integrated Studies: 2
- 6) Teaching practicum: 5

As this table shows, the credits of curriculum and instruction are the most extensive loads for the teacher. But there is no educational theoretical inquiry in this program. The most burdens of this credit system for the students are the subject teaching and teaching practicum. Instructors strictly control the student attendance of guidance and attendance for the teaching practicum. For becoming elementary school teachers, students have to take almost all subjects in elementary schools because elementary school teachers are required to teach all subjects in elementary school. But this credit requirements has produced many problems for the teacher education curriculum.

For accelerating the professional orientation of teaching jobs, new graduate school for teachers began to hire many school teachers as professors for the graduate schools. They are expected to teach

the prospect teacher students the practical knowledge to become good teachers. However, good teachers are good at the practice but not professional to teach the university students what professional the teachers are. This new policy has caused another conflict between the teaching oriented curriculum and academic discipline oriented professors at university levels.

3. Fundamental issues of teacher education curriculum

It should be noted that the historical context and the hidden curriculum for teacher education universities have formed the invisible irrational cultural capital among teacher education professors. The upgrading of normal school teachers after the war was welcomed by the normal school teachers because the normal school teachers' status used to be at secondary school level. Once they were given the title, professorship. There was no objection against it. So many science professors and social science professors were recruited as the university professors as a second choice of their pecking order of the job hunting. But they have no identify as professors of school subject teaching. They simply assume that the students are small adults and they do not believe in that they are human beings with totally different sensitivities. Besides, they are likely to look down teaching jobs and pedagogy as non-academic disciplines. Despite the fact that they are lacking of the identity of researchers of school subject teaching, they do not move out of the teaching position of school subject teaching in teacher education colleges. That is an intangible tragedy for the students and faculties in teachers colleges in Japan.

The Ministry of education has kept trying to introduce the policy upgrading the professional status for school teachers. But the subject teachers always twist this policy intention toward more "pseudo academic" orientation. How do we interpret this twisting happens in teacher education colleges? For understanding this twist, we need to scrutinize the subjectivity of teachers themselves.

Once we retrospectively overview the history of teacher, we find the teachers' hidden curriculum of "Ressentiment." There is no rational explanation why the subject professor has developed this type of attitude.

In the beginning of modern school system in Japan, many Samurai classes lost their jobs after the Meiji Restoration. A number of lower samurai classes became school teachers because they were rather intellectuals than worriers for fights. The Confucian ethics and authoritarian values were mixed in this teachers' culture. They were also Ressentiment. They had struggled to get out of the teaching jobs. But in this enclosed pursuit, their dignity worked as keeping authoritarian status of teaching jobs.

In the middle of Meiji era (after 1890's), another social class started entering teaching jobs. Most of them have background of farmers, the second and third sons of the rich farmers. They are considered as the successor of the dark traditional Japanese culture. The darkness of farmers' culture and authoritarian ethics of lower Samurai class went hand in hand and interwoven in the culture of teaching jobs.

The inferiority complex of teachers are not aware of by new coming students and teachers in teacher education colleges because the names of college and universities are good enough to satisfy their dignity. But that does not apply for the professors teaching subjects I the cases of sciences and social sciences. Their inferior complex is the major drive to teach academic (they allege) disciplines but not teaching elementary level sciences and social sciences. That is the most critical and fetal discrepancy between teaching and (alleged) academic disciplines in contemporary Japanese teacher education curriculum.