

Analyzing Lessons in Chinese Primary Schools based on Japanese Teachers' Viewpoints -A Case Study of Nurturing Higher Order Thinking-

Kikuko Miyake
Graduate school of Kansai University, Japan
miyake25@kansai-u.ac.jp

Kenichi Kubota
Kansai University, Japan
kubota@res.kutc.kansai-u.ac.jp

Makiko KISHI
Meiji University, Japan
m_kishi@meiji.ac.jp

Li Ke Dong
South China Normal University, China
likedong@gmail.com

Abstract: The purpose of this study is to clarify the characteristics of the class that are practiced in primary education in Guangzhou, China which encourage higher-order thinking skills. Research method is to have elementary school teachers in Japan watch the lesson practice video of China, and interpret the lessons that focus on thinking power development in China. The interviews with teachers in Japan are all written and analyzed qualitatively. As a result of the analysis, the characteristics of the classes in China has become clear from the perspective of five "flow of the class," "The aim of the class," "teaching method", "mutual learning of pupils" and "the skills of the pupils".

Keywords: *Primary Education, China, Japan, Higher Order Thinking, Collaborative Research*

RESERCH BACKGROUNDS

Education by packing knowledge centered in memorizing was carried out over the years in China. Meanwhile education that took local circumstances and developmental stage of pupils into account has not been carried out. This was due to overheated examination competitions. From reflection to education that lay overemphasis on these examination-oriented education, the Chinese government promulgated "guidelines on the development and reform of China's education," (State Council 1993), proposed quality education for the first time. Quality education is an education reflecting conventional examination-oriented education, which fully extends the various qualities of pupils, such as creativity and practical ability. This has become a way of thinking that directs the reform of primary and secondary education. At the same time, a cross curricular learning, "Integrated Practical Study," was introduced in 1998. Development of classes where pupils think and learn independently is expected.

On the other hand, as PISA type academic ability is attracting attention in Japan and the importance of thinking being included in the new course of study, improvement of classes for thinking development of pupils is being addressed. From these movements of China and Japan, it can be said that both countries are focusing on class designs that pupils think and learn independently.

However, as concrete teaching strategies are left to schools on both countries, it is true that there are differences in practice research for research and development by schools and regions.

Therefore a joint research on class design aimed for thinking development was carried out between Japan and China, and work on developing a class design for thinking development in primary education. Though both are Asian countries, culture has been built on its own while affecting each other. Taking context of thinking and culture-dependent into consideration, Japan's class design for thinking development will be introduced to China, and while discussing the feasibility of class we will reveal the possibilities and challenges of the class design.

Table 1: Research process

stage	content
1 st stage	Introduce Japan's class that addresses advanced thinking development to Chinese teachers through courses
2 nd stage	Both countries select experimental schools and conduct classes based on thinking development class design
3 rd stage	Compare and consider "flow of the class," "support of the teacher," "evaluation" , "learning situation of pupils" of the classes recorded in the video
4 th stage	Organize the requirements of thinking development class design and model.

In stage 1, we searched the possibilities of carrying out the class design the writers have practiced. Specifically, we conducted workshop courses for Chinese teachers to learn the class design focused on thinking development experientially, and later conducted a survey of Chinese teachers and analyzed it (Miyake 2012). In stage 2, china and Japan each selected 4 experimental schools and carried out classes developing higher order thinking cooperating with schools, and observed classes.

The idea of this research is that the Japanese and Chinese teachers can utilize their own classes as a framework to look back objectively by giving feedback to teachers the knowledge obtained in this study.

RESERCH OBJECTIVES

This paper reports the study findings corresponding to stage 3 of the research process shown in Table 1. The purpose of this study is to clarify the characteristics of the class which promote higher order thinking skills practiced in primary schools in Guangzhou, China. In this research, we will make clear the characteristics of thinking development in china from the perspective of a different cultural group, in other words Japanese teachers.

RESERCH METHDS

In this study, we investigated using qualitative research methods. First, we videotaped Chinese classes and based on the video, reveal the characteristics of classes in china focused on thinking development. To reveal from a cultural perspective, we had a group of people from different cultural backgrounds (in this study Japanese teachers).

The details of each stage are presented in the following.

Creating the video

We put Japanese captions in the video that taped from the beginning to end the classes of 2 Chinese schools the writers observed. Classes are comprehensive testing activities. In particular, we put captions on scenes such as "teachers explaining to pupils", "dialogue of pupils and teachers," and dialogue among pupils". In order for Japanese teachers to grasp the entire image clearly and pull out the language easily, we decided that it would be better to put in captions partially in the entire video than to edit parts into few clips.

We had 3 teachers doing practical study on thinking development class design in Kansai University Elementary in Osaka watch the video. (Table 2)

Table2 teachers surveyed

	Teaching experience	Subject in charge
K	15 years	Mathematics
I	25 years	Social Studies
S	36 years	Languages

Survey procedure

We had the teachers say what they had noticed while watching the videos of the 2 classes individually. The survey was conducted from May 17 to May 13, 2013. We had them watch the overall flow of the class conducted in china for 50 minutes and have them explain what was memorable throughout the video. The survey time was approximately 1 hour and 30 minutes. Before watching, we told the teachers these 4 points. 1) It is a primary school in Guangzhou city of China. 2) Both schools are experimental schools for thinking development. 3) It is a learning activity which falls into integrated study of Japan. 4) It is a class using thinking tools.

Analyzing method

When analyzing, we focused on what kind of words were commonly used when Japanese teachers talked about the class, and what were expressed by those words. We thought that words commonly used are those that are generalized in the classes of that country, and what is talked about using those words are the most typical class view. Therefore, first we recorded the teachers' interview after and while watching the video and analyzed it. At the stage of analyzing, we open coded the data written, and made a categorization. Based on the category, we will consider the characteristics of the classes in China aiming for thinking development. We made study observations with more than one person while discussing with co-researchers.

RESULT and DISCUSSION

As a result of the analysis, 93 codes were made. The codes were classified into 5 categories which indicate characteristics of Chinese classes (table 3). Table 3 shows that teaching method accounts for about half, and more than half are of the differences of how to use thinking tools. We will explain the characteristics of Chinese classes which were analyzed from the video by Japanese teachers, by each of the 5 categories while citing the recording of the interview.

Table 3 Categories and percentage of discourse

Categories	Percentage
Class flow	16.1
Class aim	7.5
Teaching method	50.7
Mutual learning between pupils	15.1
Pupils' skill	10.6

Lesson flow

Chinese classes unfold as follows, 【teacher presentation】 - 【group activity】 - 【teacher presentation】 . From how the group leader tried to ensure to follow the teacher's instructions in group activities, we felt there was a characteristic that teachers control learning activities. In Japan, though teachers make class plans in advance, in reality, classes unfold through interactions with pupils. For example, in many cases in group activities, the purpose is clear but the flow of the discussion is left to the pupils in some extent. Japanese teachers have ideas to create a class with pupils.

Lesson objective Japanese teachers felt a difference in how Chinese teachers did not present the lesson objectives to pupils. In Japan, the aim is written on the blackboard to have the pupils confirm it. In other words, classes unfold while sharing the aim with pupils. It can be said that there is a difference in the demonstration of the aim.

Teaching method

Japanese teachers were talking about the differences and similarities in teaching methods from many viewpoints such as, questioning, computer use, use of books, use of sticky notes, and way of desk patrol. Especially, half of the discourses on teaching methods were about the way of using thinking tools. From this, it can be seen that they had considerable interest on how Chinese teachers used thinking tools. "For the convenience of presenting what they have examined, they are using that thinking tool. I wonder if it is considered as a single slide in the presentation." From this remark of a Japanese teacher, it can be understood that it is used as a material for the presentation. They were also sympathetic, "the pupil's speech is educated and the teachers are also focusing on how to use thinking tools." As can be seen from the remark, "thinking tools are after all tools for organizing thoughts" thinking tools are used for organizing and analyzing thoughts in Japan. We felt a large difference in how Chinese teaching methods used it as tools for expressing.

Mutual learning between pupils

Japanese teachers felt a difference in class flow in terms of information sharing between pupils. Group work is practiced primarily as a place for pupils to share information with each other in classes in china, and each child is evaluated on how they articulate their views. There is a difference to the relationship between pupils from the fact that in classes in Japan, pupils rebuild their thoughts many times after building up their opinions.

Pupils' skill

This indicates the level of literacy and the ability to listen. From how pupils are listening focused even when the speaker's information is large, it was felt that they were focused on teaching the ability to learn on a routine basis. Also, in the scene of video where the pupils are searching for book materials to gather materials, it can be found that they have the ability and also excel to search accurately and read and comprehend large amount of information. Moreover, from looking at the information summarized in the thinking tools, how well it was summarized was a surprise.

CONCLUSION and FUTURE DIRECTION

As the third stage of this study, the characteristics of the class that are practiced in primary education in Guangzhou, China which encourage higher-order thinking skills have been revealed.

A Teacher-centered class design is a characteristic of classes in China. On the other hand, there are also movements to study the class design which encourage the development of higher order thinking skills by introducing new teaching methods such as thinking tools and group activities.

On the first stage of this study (Miyake 2012) when Japanese class practice which worked on advanced thinking development was introduced to Chinese teachers through courses, while there was a positive response, three challenges "fear of not being able to control," "way of teaching thinking tools" and "fit between the themes and thinking tools" was also cited as an issue. We believe there was a tacit awareness to control in classes for thinking development.

To introduce thinking tools in class as a tool for thinking, theming is essential in practice. From the fact that the course carried out in china did not treat which classes can be expanded that makes you think of which theme while relating with the curriculum, Chinese teachers investigated by themselves and worked on class practice. Here,

the class view of Chinese teachers was strongly reflected.

It can also be seen that the ways of using thinking tools was introduced to classes, different from the intention Japanese teachers instructed.

In the future, we will clarify how teachers in China analyze Japanese thinking development classes in primary education. Then compare the characteristics of classes which encourage high order thinking skills between Japan and China, and organize the requirements in class design for thinking development and model it.

References

- The Council of Local Authorities for International Relations. (2012/9/30). Chinese compulsory education. http://www.clair.or.jp/j/forum/c_report/pdf/325.pdf
- Mitsuishi, H., & Ru, G. (2006). Standard curriculum for elementary schools and environmental education of Japan and China.: The Teacher training curriculum development research center of Tokyo Gakugei University.
- Miyake, K., Kishi, M., Kubota, K. & Li, K. (2012). The implementation of teacher training of the class design for thinking development in China. □
- Miyake, K., & Shioya, K. (2012). The feature of the Muse study. The class design for thinking development by Kansai University Elementary School style. Kansai University Elementary School (Ed.) . JP : Sakura-sha., 36-53.