

Summary of the “Report on a Study of Teacher Training Programs Implemented through Collaboration between the Boards of Education and Universities”

1. Purpose and summary of the research

(1) Purpose of the research

The continued learning of teachers, as well as researchers and policy makers, is essential for nurturing children who possess the competency to continue their learning in the years to come. The purpose of this research is to examine teacher training programs, whose goal is to create teachers who are able to continuously improve their lessons, and to present a clear model program and a training system (structure) to support the program, with the aim of achieving a comprehensive and holistic reform of pre-service training/employment/in-service training in order to develop “teachers who continue learning”.

(2) Outline of the research

The research studies examined the collaborative efforts of the boards of education and universities, which had been developing and implementing training programs in response to the current issues in education, such as by implementing active and collaborative learning, and also studied the contents of the programs, including the overall system, as well as the learning outcomes of the participants. In order to be able to study the programs in detail, the subjects of the study focused on the training programs of seven prefectures collaborating with the University of Tokyo (Consortium for Renovating Education of the Future). The study adopted a case study method which integrated research on various documents, a literature review and analysis of the essays given by the participants of the training programs, observation of training and lessons, and focused interviews with the institutions implementing the programs.

[Study period: FY 2015-2016, Research Project Leader: Akihide Osugi (Director of the Department for Elementary and Secondary Education Research)]

1. Summary of the research outcomes

(1) Research on teacher training in the learning sciences: Design-Based Implementation Research

Based on a review of research conducted in the learning sciences relating to teacher education, this study was able to confirm that not only is it important to improve the quality of the teacher training programs, but also to conduct “Design-Based Implementation Research” which looks at the entire system encompassing the program. This study therefore focuses on the creativity of partnerships between educational policy makers and researchers who design the programs as well as the system that supports those programs. In addition to raise the quality of program itself, the study hypothesized that the partnerships should strive to raise the quality of supports for the course as below:

- Durability: If the same attendee has the opportunity to use what they learned and to re-learn it after s/he has finished the program, s/he will learn deeper and longer than without such opportunities.
- Multi-layer-ness: If the same attendee is surrounded by principals and veterans who understand well the same content as the attendee has learned, s/he will be more active in implementing their learning into practice in her or his school than but for those supports.
- Expand-ability: If the same attendee has the chance to go beyond her or his classroom, subject, school and district to have conversation on their practices with various partners across these sections even after the program finished, s/he will become life-long learners than except for those chances.

(2) Teachers’ standards and training programs of prefectures and ordinance-designated cities throughout the country

The results of research on the teachers’ standards (image of a model teacher) and training programs of the prefectures and ordinance-designated cities gained from websites and various documents showed that 70.1% of the total number of institutions conducted follow-up training after the training for newly qualified teachers, such as training in the second or third year of teaching, indicating an

awareness of the importance of durability. However, although almost all of the institutions had established the image of a model teacher, there were very few institutions which had connected it with the annual training programs or which had set target goals.

(3) Teacher training programs implemented through collaboration between the boards of education and universities: Saitama prefecture and Tottori prefecture

The study selected Saitama prefecture and Tottori prefecture, which had very similar teacher training programs, and compared their training programs for upper secondary school teachers. The content of the training programs of the two prefectures were very similar in that they included the components of “lectures on learning theory”, “classroom experiences”, “teaching using past teaching materials”, “detailed examination of the outcomes of the teaching”, “development of self-made lesson plans”, “teaching of the lesson”, “looking back on the teaching experience”, “reflections on beliefs about learning”, and “a cycle of learning to continuously improve the lessons and the building of networks”. The training of both prefectures centered on a form of collaborative learning employing a lesson style referred to as the “knowledge-constructive jigsaw method”. However, there were some differences between Saitama prefecture and Tottori one. The Saitama prefecture has the greater number of re-iterations of the cycle of teaching in the affiliated schools based on what had been learnt in the training and then reflecting upon the outcomes of the teaching, and greater number of interactions with people with different levels of experience.

Based on Tottori prefecture’s analysis of the results shown in the “reflection sheets” filled in by the participants after the training as shown in the models of Figure 1, taking a look at one year of training, development was seen from Phase 1 going on to Phase 2 as shown in Figure 2, but development was difficult to attain in Phase 3. By contrast in Saitama prefecture, the descriptions of the key points in lesson planning given by the participants on the last day of training, the rate of participation in the core programs in the following year or later years, and the quality of the “open”

classes suggest that the learning outcomes were utilized by way of being brought into the teaching practices of participants.

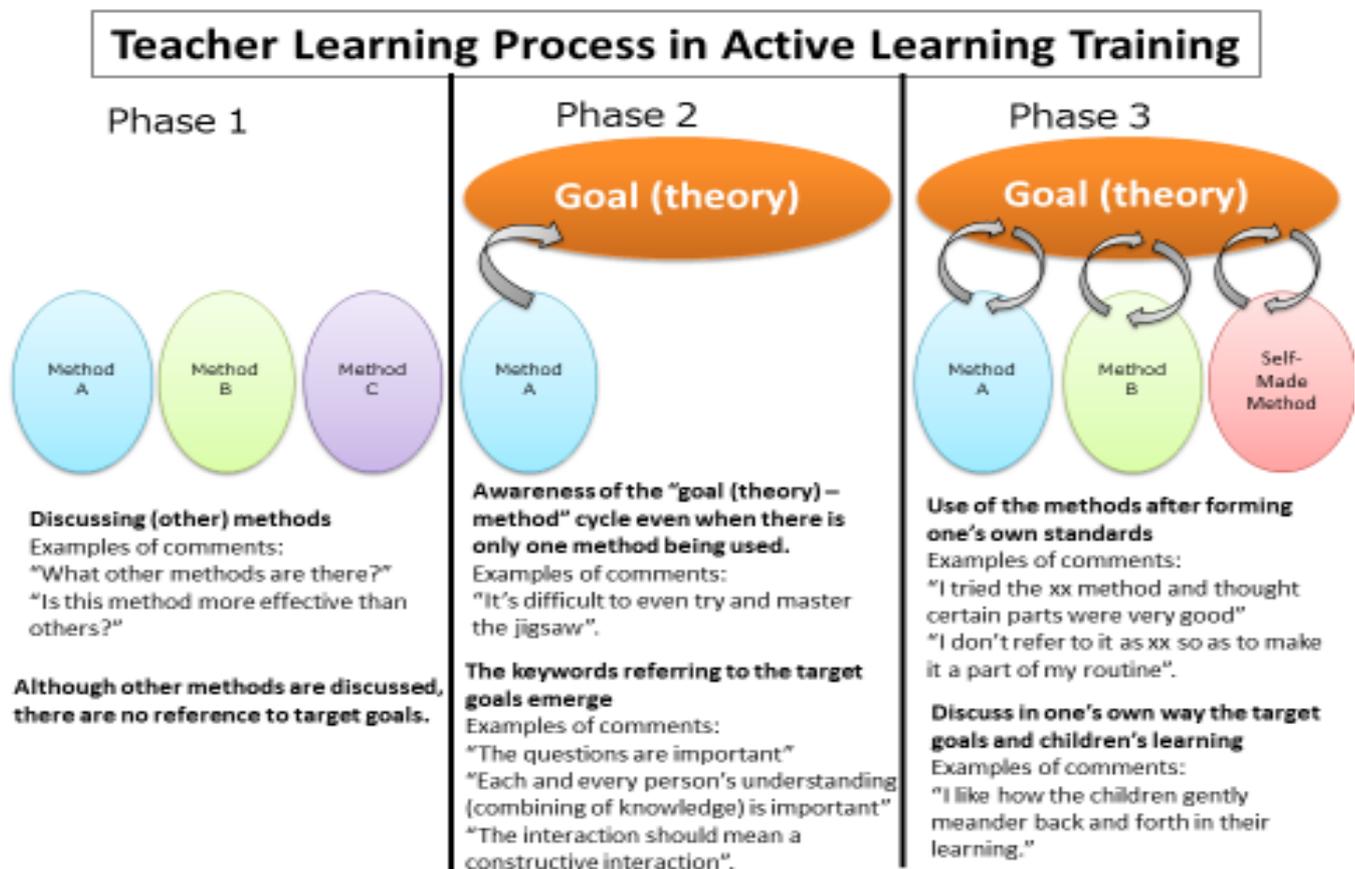


Figure 1: Learning process in training programs

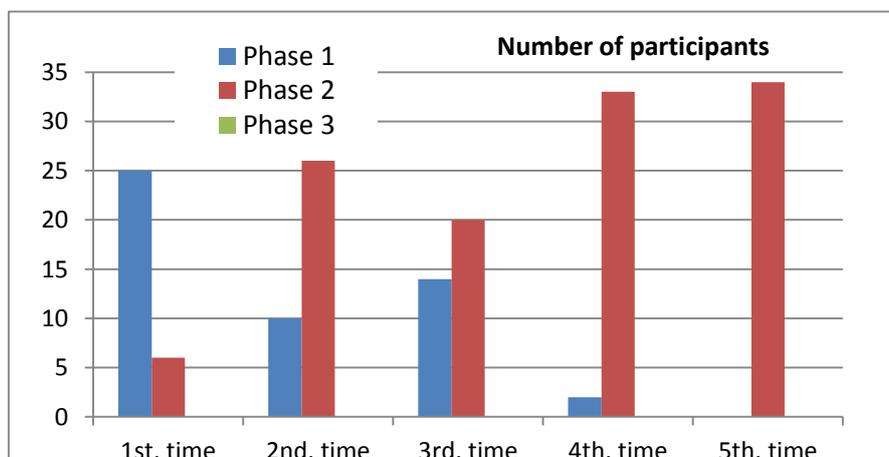
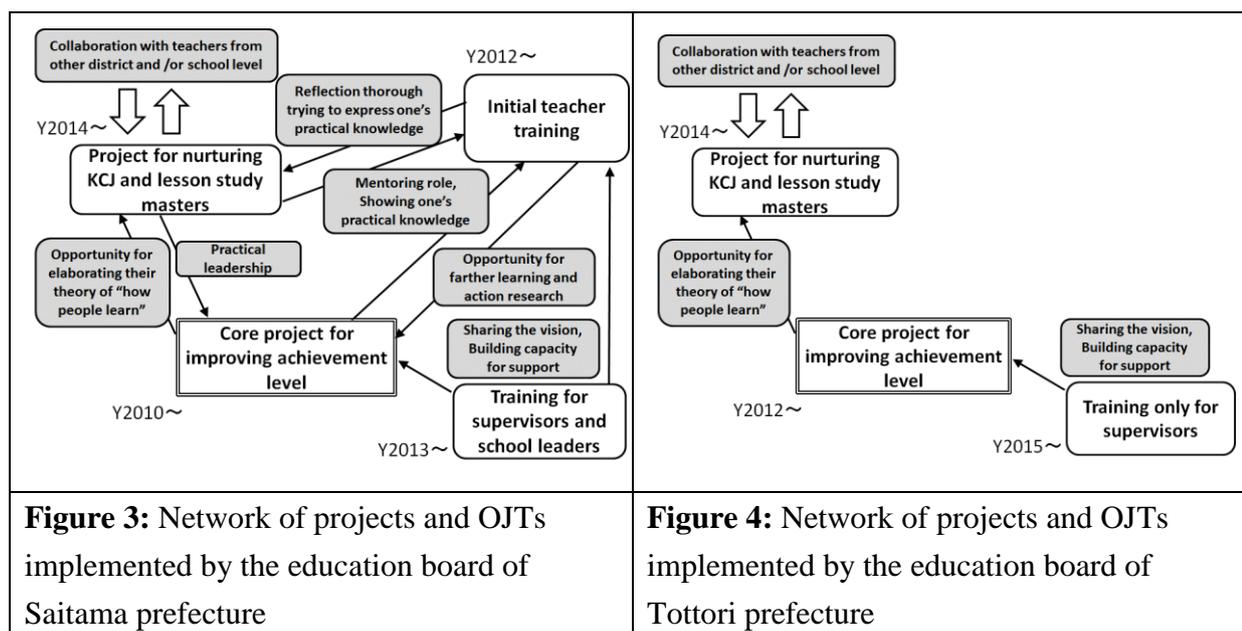


Figure 2: Analysis of the descriptions in the "reflection sheets" after the training (*Phase 3: nil)

An examination of the training systems in the two prefectures showed that Saitama prefecture, as shown in Figure 3, tends to take a multi-layer approach with the newly qualified teacher training being developed in tandem with other core programs as well as the administrator training and supervisor training (white rectangles in Figure 3), whereas Tottori prefecture maintains a structure where the training does not easily connect to other training (Figure 4).



The above suggests that having “durability” and “multi-layer-ness” in the system engenders the willing “expansion” of the participants, and encourages teachers at different stages in their career to rely on each other as a learning resource and to continue consistently with their learning. By the interactions among a number of institutions including those in the two prefectures, Tottori prefecture has been producing and examining various plans for improvement such as creating multiple layers by fostering past participants as mentors. The creation of a “community for continued learning” such as collaborations between the boards of education and the universities is an issue to be dealt with in the future.