

Pursuing the Ability to Transform Oneself through Reflection: Eight Month Longitudinal Qualitative Research on Cognitive Growth of Two Pre-service Teachers

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1. Introduction

Teacher education is at its turning point in Japan and teacher educators are pursuing “practical leadership.” Practical leadership, however, has a variety of meanings. It is different to different teachers, teacher educators and scholars. The Central Council of Education developed the definition of “practical leadership” in the report issued in July 2006¹. The council, referring to “zest for living,”² mentioned that qualities of teachers needed in general were (a) a sense of mission as an educator, (b) insightful understanding of human development, (c) a sense of devotion to pupils and students, (d) professional knowledge in one’s field, (e) extensive and rich learning, (f) “practical leadership” based on from (a) to (e). In the same report, it referred to “qualities needed from now on,” which were (a) abilities and qualities to act with global mind, (b) abilities and qualities to live in the drastically changing times as a professional, (c) abilities and qualities necessary to implement teaching and instructing as an educator. In addition, it said it was important that teachers should

¹ Ministry of Education, Culture, Sports, Science and technology website:

http://www.mext.go.jp/b_menu/shingi/chukyo/chukyo0/toushin/06071910/002.htm

² “Zest for living” is also an abstract concept. It is also different to different educators.

find their own specialty and enrich individuality. Nobody can have any objection to these qualities. When we think of “practical leadership,” it can be said that it includes all the senses, abilities and qualities mentioned above. It eventually means “total qualities and abilities as an educator” [Tahara, 2005, p.13].

However, even a teacher with enough “practical leadership” and rich experiences could fail to manage her/his class. It is true that a teacher with higher skills and abilities might lead students better. But there are many cases that a teacher recognized as a “super teacher” faced the class break down. We should see the reality that any teacher might have lack of “practical leadership.” In short, this is the matter of probability. To say more, this comes from the nature of teaching.

Without paying attention to this nature of teaching, it is believed that because the teacher doesn't have “practical leadership,” she/he has troubles. If so, workshops for “practical leadership” are to be held permanently. If “practical leadership” is defined unreasonably, this will produce conformed teaching and keep teachers away from students. Teaching comes from the heart of individual teachers and it isn't anything that teachers are forced to do [Noda, 2007, p.102]. Any teacher, even a “super teacher” can't handle every student because students have a variety of backgrounds and “self-cultures³.” Experience is not always good enough. Masterful teachers know the value of asking students, colleagues, supervisors, parents, administrators and teacher educators to observe their practice and to offer a critique of it. Once it is given, they reflect it on their teaching in practice. We can say, therefore, it is necessary for an individual teacher to acquire “the ability to transform her/himself through reflection” in order to deal with individual students. Individual teachers are required to improve her/himself as long as she/he is on the teaching position. In this sense, this ability is the foundations of “practical leadership.”

The aim of this paper is, using qualitative methods, to track and explore how two future teachers had reflected their learning and transformed her/himself during 8 months.

2. The reflection to transform oneself

At the beginning, the meaning of the ability to transform oneself should be examined. Dewey says that “the teacher loses the position of external boss or dictator but takes on that of leader of group activities [Dewey, 1997, p.59].” This means that teachers should transform her/himself.

³ I here use the definition of “self-culture” developed by Kurachi. She defines it as “the culture which one can perceive as one's culture [Kurachi, 1998, p.39].”

To “transform” for the teacher is: to face and accept oneself, to be fully aware of one’s position, to have multiple perspectives and reflect on one’s teaching, and to observe a student well and approach her/him to step forward to her/his own future. Through this process⁴, the teacher is able to develop her/himself, which is the cognitive growth. Then, “reflection” becomes really important part of this process⁵. Reflection is the spiral process based on the motivation as a teacher. The motivation as a teacher means what she/he would like to provide to students.

Reflection⁶ is “the mental structuring or restructuring of an experience, a problem or existing knowledge and insights [Wubbels & Korthagen, 1990 cited by Admiraal & Wubbels, 2005, p.317].” Polanyi also indicates in detail, “In the act of reflection, we cause our personal wisdom and experience to interact with the objective realm of knowledge to produce personal knowledge which transcends the disjunctive between ‘subjective’ and ‘objective’ [Polanyi, 1958, p.300].” The concept of “reflection” was well-examined by Korthagen [Korthagen, 1985]⁷. Korthagen develops a generic process of reflection, which are so called ALACT, named after the first letter of its five stages, (a) Action, (b) Looking back, (c) Awareness of essential aspects, (d) Creating alternative methods of action, and again, (e) Action/Trial [p.12].

Korthagen mentions sample logbook citations of each phase, action, looking back, and awareness of essentials, some of which are as follows: a mathematics lesson was taught by a student teacher, which is in the phase of action. A citation of looking back on the action is like “This lesson went fine. They are a bit noisier than usual, but I could control them all the same.” A citation of awareness of essential aspects is like “Ronnie was not present; that may have been a cause of the extra noise.” [p.12]

⁴ This is the ability to “live together.” Sowa says human beings have three aspects, which are time, space, and company [Souwa, 2004, p.32] for living together. Living together means that human beings sharing the same time and space give some influence on each other and create more affluent relationships. This means that people should transform each other. Eventually, this process will make our quality of living developed. So, in the classroom, a teacher transforms a student and at the same time the student should transform the teacher.

⁵ The importance of reflective thinking in the professional development in teacher education has been covered by some scholars. [Korthagen, 1985; Spark-Langer, Simons, Pasch, Colton, Starko, 1990; Beattie, 1995; Trotman, & Kerr, 2001; Admiraal & Wubbels, 2005; Parsons, & Stephenson, 2005]

⁶ Van Manen proposes that reflective thinking occurs in three stages: “technical reflection,” which the teacher considers and find the best way to reach an unexamined goal, “practical reflection,” in which the teacher examines the means and the goals by asking questions, and last “critical reflection,” in which the moral and issues are considered along with the means and goals.[Van Manen, 1977]

⁷ Some authors cover the practical significance of distinguishing the phases of reflection. [Admiraal, and Wubbels, 2005]

As Korthagen indicates, the action and the trial often overlap together. When forming one's individuality, character or thought, one can always be on the process. This means that one's individuality, character or thought is connected with her/his past. Thus, it is really difficult to tell when and where one started to form her/his individuality, character or thought. So, the process of reflection has four phases, which are action/trial, looking back the action, awareness of essential aspects, and creating the alternative methods of action. Then one goes back to action/trial and repeats this process again and again. Through this process, prospective teachers should earn problem-solving attitudes, which are the most important abilities in the classroom. Pre-service teachers should get their own growth to teach without help of teacher educators through this learning.

Secondly, it could be said that the cognitive growth of a preservice teacher is divided into two categories and there are "philosophical level reflection" and "the practical level reflection." The philosophical level reflection is linked with her/his enriching ideas, perspectives and thoughts on education. The practical level reflection is connected with teaching in every moment. Moreover, the philosophical level reflection affects on the practical level reflection, while the philosophical level reflection could be the foundations of the practical level reflection. They are closely connected each other. In addition, reflection of a matter is going on with/ is closely linked with reflection of another matter simultaneously. For example, a preservice teacher used the debate method in her/his class, which might be understood that she/he did it in the phase of action to improve her/his teaching. This experience might give a hint to solve another matter, which is understood as creating an alternative method. Also, with this action, she/he could find another aspect of an individual student and may drastically transform her/his teaching philosophy.

3. Method

Qualitative research is useful for this study. First, the aim of this study is to understand the development of two prospective teachers. In other words, I will explore the reality of two future teachers. Qualitative researchers usually "strive to understand the meaning people have constructed about their world and their experiences [Merriam, 2002, p.4]." Weiss also says, that qualitative research develops "detailed descriptions" and describes "how events occur or what an event produces" and "how events are interpreted" holistically [Weiss, 1994, pp.9-10]. Second, the qualitative research gives us opportunities to integrate different subjectivities and perspectives. As our "reality" consists of, what Walford calls, "myth of objectivity [Walford, 1991, p.1, cited by

Holliday, 2002, p.7,]” in order to bridge between the reality of an individual and another, in the qualitative research, an individual is “primary instrument for data collection and data analysis [Merriam, 2002, p.5].” Last, the qualitative research provides data and information to create hypotheses for the quantitative research. Researchers gather data and information through official/unofficial interviewing, casual conversations, and observations per se to build a hypothesis and they can prove it with the quantitative research. Therefore, the quantitative research and the qualitative research are closely connected with each other.

To explore her/his reflection and transformation means to see their realities through her/his eyes. Also, their experiences should be examined through their perspectives. Seeing the process of her/his learning, I especially focused on her/his cognitive growth on teaching. I audio-taped and transcribed all interviews. Also, all journals and reports they wrote were filed and casual conversations between them and me and their comments in the class I was responsible for were noted. I picked up her/his comments, remarks, episodes related to the process of reflection from them and put them in chronological order. I coded and categorized them in accordance with the distinction between philosophical and practical level reflection and each phase of the reflection process. Then the cognitive growth of two prospective teachers was addressed.

4. The Learning of Student A

The student teacher named A enrolled this seminar course in the school year of 2007. He was pursuing his professional career as a high school social studies teacher.

1) Philosophical level reflection

Before practical training started, he began to cultivate his philosophy of teaching. Student A described his philosophy of teaching was to be very strict during the class, on the other hand, in very friendly fashion during the break. He told that the teacher should “be very strict during the class and have a variety of knowledge so that students listen up her/his talk and get interested in lessons.”

He gave an example. The teacher for a year had taught him earth science when he was a high school student. According to him, the teacher looked very strict and often warned vigorously students who didn't listen to his lectures. The teacher had a lot of knowledge and showed his sincerity to students' questions. Students often feel, “Indeed? That's a surprise!” Through such lessons, student A became interested in earth science.

Through the debate held in the class, student A was asked “What would you provide for his

future students?” and “Why do you have to be strict during your teaching?” Then, he started looking back his philosophy. He had become confused about why he wanted to be a teacher. He said, “What I told you before will make a complete change.”

The reason why he had been obsessed about knowledge was that he had received a lot of influences from lectures. He told:

Lectures, I have gotten a lot of influence from them. Lectures are very interesting to me. (Omission) I myself like TV games and per se... and one of them is somehow studying, reading books and getting knowledge. I am such a person.

Around this time, he showed some cognitive growth. He started viewing his idea in another perspective. He felt that students would not feel in the same manner with him. He spoke to himself, “But, students would say to me, ‘Knowing that, what would I do?’” He recalled a female junior high school student when he had taught at a cram school. According to him, the student was gloomy and had always been alone. He thought if she could have been open to her classmates, she could have enjoyed herself. He spoke to her and tried to open her up, but he failed. Teaching subject matter knowledge neither worked.

Then, student A began to pay attention to “zest for living.” His zest for living consists of three capabilities: first, the capability to cooperate with others. He became aware that he had been developed with his friendships. He referred to, for example, the argument with his friend. The argument broke out when he told the friend that he had caught a student cheating in an exam at the cram school. The friend asked him, “Why don’t students have to cheat in the exam?” He became upset and grabbed the friend by shoulder and said to him bluntly, “You don’t understand my feeling!” But, this argument led him to recognize that he himself had only pushed his opinion on his students. He thought he should have considered why students had to follow the rule. He wrote in his report that “Experiencing the pleasure in school like talking with friends or participating in school events, students will have more opportunities to show their opinions and to change their attitudes to study.”

He added that: “If a student feels comfortable in her/his class, she/he should feel respected by others. Therefore, she/he would respect others. Respecting each other leads one to listen to opinions of others, speak at the class, and so on. It is very important. It will change their perspectives to human beings and studying.” Therefore, he hoped his future students to have

good friends and then school could be their happy place. The ability to cooperate with others, from his perspective, was the most significant ability for his future students.

Secondly, the capability to be inspired was one to be moved even with trivial matters, or to think of others. He wrote that the more students had this ability, the more the number of bullying would decrease.

Thirdly, he mentioned “the capability to find her/his topic and learn by her/himself.” He described it was the ability to have an awareness of issues in class and daily life and deepen her/his interest and curiosity. He had, in the cram school, seen many students uninterested in anything, and they were unresponsive even if he had spoken to.

He wrote on his mid-term report of teaching methods of social studies that “I had thought of social studies as the subject to memorize knowledge. However, I have reviewed this perspective and now I think that it is essential for students to get interested in, and develop their curiosity about the society. Also, students have to think about the society by themselves.” This was regarded as his awareness of essentials.

He thought that ethics was a good way to cultivate these three abilities. He described that “Ethics is the subject to think of what human beings are.” Thus, in his future ethics class he “would give students much time to ponder what human beings are and who they themselves are.”

However this idea was broken down through his practical training. From September to November, he had participated in Mr. B’s class seven times in total. One day, I asked him:

Me: What would you respond to the question, “Why do students have to study social studies?”

A: (After 35 second silence) Just for their future, I guess...

M: What does “for their future” means? Tell me about it in detail. For example, why do they study mixed farming?

A: Just to suit the occasion... (if the student knows it,) he can explain such a thing to his future wife and will look cool. (Laugh)

It could be said that his philosophy on teaching had been disorganized with his practical experiences.

2) Practical level reflection

A) Losing his motivation to be a teacher

Student A was supposed to start his practical training from the end of August. But he couldn’t. He

was, according to him, exhausted and depressed. He talked about his feelings. He knew he should have worked harder for his club team, and should have also studied philosophy and education more. He excused himself for doing them with half hearted attitude, because physical strength was limited and his capacity wasn't enough.

My sense told me that he was losing his motivation to be a teacher. He got interviewed by Mr. B, the mentor teacher, in the morning on Sep. 20th, but in the afternoon of the same day, according to a professor, he visited his office to consult about how to become a civic servant. He told him that he would give up becoming a teacher as he didn't have enough capability.

B) Meeting another idea of teaching

On the first day, he observed Mr. B's ethics class of the second year student. When student A, Mr. B, and I reflected this practical training after the class, he told his impression that Mr. B explained everything in easy words. Mr. B said to him that many students were not interested in ethics, but as they would have to take the entrance exam of universities, understanding his words was their first important step. Student A was surprised with interactive teaching method as well. His fixed idea of teaching was that teachers talked one way of only difficult things in difficult words, especially in ethics class. This might be first opportunity in which he was aware that teaching was adjusted to students.

C) Having opportunities of practice

Through class observation, he had some opportunities to have practical level reflection. One day, Mr. B gave his students an essay test. Before the test, student A was asked a question by a male student, "Which was the unit of precipitation, mm or ml?" He responded to the student like "Isn't it mm?" After a while, he made sure that the unit of precipitation was mm. Checking that he gave the correct answer with the text book, he didn't reflect how to answer for the male student.

Circulating among students' desks during the test, he noticed one important thing that he couldn't judge a student with a glance. He first predicted that students not having listened to Mr. B's talk couldn't do well in the test. However, he recognized some of them were doing very well. He was especially aware of a student who usually seated himself on the rearmost seat and had always slept during Mr. B's lecture. The student was, according to him, "enunciating his idea precisely, or somehow using keywords provided to the students in the context." Such awareness brought about his looking back.

But, his looking back wasn't enough deep, because he didn't imagine if he had been Mr. B what

he would do. Although he had set his goals during this school term⁸, as Mr. B pointed out, his descriptions on his journal had still been vague. He wrote, "I could observe students with broad view" or "Mr. B gave lucid explanations," for example. So, I asked him, "If you had been the teacher of the class, how would you have taught?" He answered, "Although I couldn't do like Mr. B, I would like to explain like him as possible as I can." He hadn't thought of how to introduce MR. B's ideas on his future class. So, as Mr. B told me, student A didn't have any intention during class observation and he observed Mr. B's classes aimlessly. It could be said student A just only observed how Mr. B. organized his class and took memos about what he noticed.

Thus, I felt another approach was necessary for him. My sense was that he had lack of subject matter knowledge (He seemed he wasn't even aware that he had lack of subject matter knowledge.) I assumed, as Mr. B also agree, that having failure in front of students would lead him to study more. Therefore, Mr. B and I had the consent that Mr. B would provide minutes for him to explain key words in front of students.

He was assigned to explain Hinduism and living of Indian people. As he recognized that he didn't have enough subject matter knowledge to teach, he went to the library. He acquired two pictures, a picture of people bathing in the Ganges and a farmer taking care of his cattle, to use in his 10 minute lecture. This was the phase of action/trial of practical level reflection. The next day, he looked back his action. He wrote at first, "(I) should have paid more attention to the reaction from students as well as how to organize the class." He said to me, "I distributed two pictures and explained about them. But, they only looked at the pictures and showed no interest." He was aware that only providing pictures hadn't raised students' interest. This might be his awareness of essentials. He told me, "I shouldn't have given some comments about these pictures and instead should have asked students like 'What picture is this?'" He created the alternative method of action regarding his 10 minute teaching. This was surely his development this time, and he would do his action next time based on this reflection.

5. The Learning of Student O

The student teacher named O enrolled this seminar in the school year of 2007. She was

⁸ Looking at Mr. B's teaching, student A set his three goals during practical training. First, he should communicate with students. Second, he should watch and grasp the whole class, paying attention to some movements and attitudes of students. Third, he would think of what he would do, if he was the teacher responsible for the class.

pursuing her professional career as a junior high school social studies teacher. Her enrollment on this course was a second time. According to her, when she entered the high school classroom as a student teacher for the first time, she simply thought that as her age was close to high school students, it was easy to have casual conversations and good relationship with them. However, the situation was completely different. As soon as the teacher responsible for the class called her "Teacher," she became nervous and her mind became completely blank. She was not able to talk with any student and felt that some students had nasty talk behind her. This was her first collapse to become a teacher. She keenly said, "There was a big gap between my dream and reality."

1) Philosophical level reflection Student

O's philosophy as a teacher was to give students affection, which was "something remaining inside their heart." This was like, she described, a mother says to her child "Welcome home." It was, according to her, "Whatever, a word, an expression or an attitude, remains in students' heart is the affection."

She referred to a teacher of her elementary school who had always presumed her feelings. When her family suffered a financial problem, and her friends often asked her which high school and college she was going to, she felt isolated and didn't want to say anything about this matter. The teacher didn't say anything to her, but seemed to understand her circumstances and feelings. She had often felt easy because she knew that the teacher had been caring about her.

Student O entered her phase of looking back her action. She might have thought of questions from a classmate, for example "How will you take care of really bad students?" and "If it doesn't remain in students' heart, don't you think it is the affection?" Then her definition of affection had been transformed. She described:

If my affection won't stay in students' heart, to say honestly, even if they won't remember me, it is fine. (if I could) give the vitality, and provide affection for students, it is the affection to students. I have thought.

Her new definition of affection was to give her future students the vitality to live. But she had no idea about how to do it. She continued, "Without thinking about whether my efforts work or not, I will come close to the student, doing what I can do then."

She again examined and developed her idea of "the vitality to live." She described it as "the strong mentality to tackle the reality." She thought that students were worried about many

things and thus, students escaped from their reality. The role as a teacher, she thought of, was to strengthen students' mentality and help them tackle with their reality, in order not to escape from it. This idea obviously came from her own struggle to be a teacher.

Although she emphasized that students needed the mental strength, she didn't pay attention to social factors on misbehaviors or "weak" mentality of students. Her idea of having "strong" mentality seemed too simple. The reason for this was she saw education only through her eyes. She cultivated her philosophy of teaching only from her own experience. For example, she and I had a conversation as follows:

Me: Suppose that students ask you why they have to go to school, how will you reply for the question?

O: (Pause) There are things that they can learn only at school.

M: What are those?

O: Helping each other.

M: You can learn it anywhere else, for example at girls scout.

O: Studying.

M: You can study, sometimes harder, at juku (preparatory schools / cram schools).

O: Well, right...we can study at juku, too. (Omission) Why should we go to school?

All her answers were all first things she hadn't considered yet. Another example was that she said she would utilize participatory study as her teaching method, because it "cultivates strong mentality." For it would "give many opportunities for students to speak in front of other students." Her answer was only one sided view of the participatory study.

But after one month practical training, O's idea on education had been developed and became more concrete. O submitted her mid-term report of teaching methods of social studies and asserted in her writing, "It is important for an individual to learn. Living means thinking and forming opinions." As her philosophy of teaching was developed, her idea of social studies education was also improved. Three months ago, she didn't think of why students should study social studies. Her answer was, for example, that "Geography is needed because through learning the diversity on the globe, students can broaden their minds." Although I agreed on her answer, I doubted if her answer was grounded, because she didn't mention how she had broadened her perspectives through studying geography.

This time, she wrote that social studies education was “to give students abilities of critical thinking, having interests and questions, and collecting, sorting and analyzing information.” For this purpose, she will provide “organically connected” knowledge to her future students.

She was sure that through exchanging ideas and opinions with a variety of people in debates, her future students will “find out new things, interests, and questions and develop their learning.” At the same time, her idea on the debate method became more complicated. She paid attention to difficulties of the debate method and wrote: “first I should give them the basic knowledge to discuss the theme before the debate. Second, I should be careful about how to carry out the debate in a class which has the bullying. Third, I should see how students develop their discussion.”

After almost two months practical training, O reaffirmed that traditional “talk and chalk” teaching was often necessary. The class she attended one day was social studies class for third year students and the achievement test was scheduled on the next day. The class was, according to her, “just for cramming at all.” Students were all serious, and all the more the remark of Mr. P “(Teaches should provide) what students at this moment need” was very impressive to her. She told me:

I thought this was a method. It is important to tell or check important things…especially for third year students. (Omission) I hadn't paid attention to lessons only for exams.

However, I should say that she couldn't develop her philosophy on teaching more, because she hadn't talked about her philosophy of teaching. It was supposed that she couldn't have afforded to do it.

2) Practical level reflection

A) Facing the mental barrier to students

Her practical training started at a junior high school in July. When she entered a classroom first time, some students began to talk about her in low voice. She tried never to mind if they would say anything bad about her, but she had no way to communicate with students, which was the highest wall for her.

I observed her practical training on July 23rd. I felt that O was really nervous. During the lecture of Mr. P, the mentor of her, she began to walk around students. But, during about 40 minutes, she went back and forth in the back of the classroom. She had been confused about how she should do. In the last ten minute when students worked on exercise problems, she noticed that

a female student, who was seated in front of the classroom, misunderstood how to calculate this formula. Yet, eventually she missed the chance, too.

As a reaction of her lack of confidence, student O revered a high school teacher who had given a lecture in the junior high school. (She observed this special class held on July 19th.) While, according to her, she often became nervous and felt “My mind also went blank” even during the mock teaching held in the course of teaching certificate program, the teacher seemed that she “was strongly minded,” and “had the full impact.” She said, “I have a sense that I was overwhelmed” and added “I wish I could be like her in her future.”

O thought that just speaking to students was the only way to overcome this difficulty. She also understood that there was no one to help her about this matter. She said:

I guess that it might be easy to speak to a student like “You don’t understand it, do you?” They might give me some responses. But, somehow, I can’t do it. The reason is that I can’t take that first step.

During the makeup class in the beginning of August, she confessed, she “felt scared of students, and was afraid of even making eye contacts with students.” She recalled her bitter experiences of practical training at high school last year. Although she firmly believed that teachers couldn’t have any mistake, she recognized that the high school students understood bookkeeping⁹ more than her. It was, according to her, “big pressure” to her. This meant that a part of reason why she couldn’t have enough confidence to communicate with students was her lack of studying. This was also understood as her awareness of essential aspects related to practical level reflection.

However, even after five months have passed, this was still the biggest problem for her. On December 5th, she observed a social studies class of another student teacher. She only took memos in the rear end of the classroom and stayed there. She was too nervous to move around although she was allowed to do it. Eventually she stayed in the rear end of the classroom in 40 minutes and last 10 minutes she started to walk around and missed all the opportunities to communicate with students. In the evening, she e-mailed me and told, “I self-examined today’s practical training and I admit that I have recently been loose. It was a good opportunity to review my practical

⁹ At that time, she observed bookkeeping classes at a high school.

training.”

Two weeks later, she told me that it was really hard for her to approach students during class. She said that she needed more courage to do it. She confessed, however, as follows:

Because, if I speak to a student, other students would think that the teacher was talking with somebody...well, they looked at me even when I entered the classroom. (Omission) I couldn't speak when others look at me. I can't be a teacher...I am lenient with myself. (sobbing)

She, after a while, cheered up herself and said to me that next time she would go to the classroom to approach students a couple of minutes before the class starts. She thought that it might be easier than during the class. This was her first alternative method of action to communicate with students. She added that she couldn't depend on someone about this matter if she would be a teacher. She clearly declared that she had to overcome this mental barrier by herself.

B) Meeting another idea of teaching

Mr. P one day assigned his students to take memos while they listened to a high school teacher's talking. She criticized this method and said:

I think it is really difficult even for me to listen to others'talk, while taking memos. Sometimes, I understand better when I focus on her/his talk.

From this transcript, it is reasonable that O was against the method because “she herself was not good at taking memo when she listened to others. She hadn't examined whether, because she was not good at taking a memo and listening to others'talk, it was not necessary for students to acquire this skill. O, this time, should have recognized that she saw it in the view of her own, not in the view of teachers responsible for the students.

C) Realizing the lack of studying

As she observed Mr. P's classes, student O came to feel that she had lack of subject matter knowledge of social studies. She talked about a lesson¹⁰ in which Mr. P used PowerPoint to show a variety of images of Bushi(a member of a powerful class fighters) like Yoshimitsu Ashikaga, Ieyasu

¹⁰ The lecture focused on the birth of Bushi.

Tokugawa, and others. According to O, the students hadn't made sense why Yoshimitsu Ashikaga had shaved his head. They said that Bushi should have had Chonmage(a topknot) and had thought Yoshimitsu Ashikaga was a monk.

I quoted a question from my former student and asked, pointing a drawing in the text book of two men looking like farmers, "Why do they have a sword? Are they Bushi?" She answered, after 4 seconds silence, "Farmers also had...their own world." Eventually she couldn't answer at all. This episode showed that her preparation was just cramming the knowledge described in the text book and didn't approach the essence of each lecture. She confessed, "I haven't studied hard yet, as I have always headed for the easy path." Therefore, she didn't have foundations, which are "organically connected knowledge" to teach junior high school history. Therefore, she couldn't have any idea how to teach. This was also her important awareness of essential aspects of practical level reflection. She confessed that:

I had a lack of studying very much. I can't say boastfully that except the textbook used in the junior high school, I have used homepages for my preparation.

Apart from her practical training, student O had mock teaching in the course entitled teaching methods of social studies. The theme of her class was to focus on the diversity among Asahikawa. She used a question in the introductory part, "How do you think of Asahikawa?" Her classmate answered a variety of images of Asahikawa, which were completely different from her own. For example, although her image of Asahikawa was that Asahikawa had a large population, a student from Tokyo said "There is a small population here." Eventually, she couldn't connect their answers to her conclusion. She looked back on her teaching, and realized, "My image of Asahikawa was just only my own. I didn't expect different images from my own. As the result, the theme of my class became vague." These were all necessary awareness of essential aspects in practical level reflection.

6. Current Findings

As mentioned in the table 1, through this eight month longitudinal qualitative research of two prospective teachers, I can indicate the following findings: First, both student teachers were overwhelmed with real teaching practice. Their philosophy of teaching, zest for living or the strong mentality to tackle with the reality never appeared in their journals and was never

heard during interviews after their practical training started. This means that their minds were too much occupied with a lot of practices consisting of teaching. It is expected that they would combine their experiences as a student teacher with their philosophy of teaching. This process would lead them to further examine why they have chosen teacher as their future professional career, and to cultivate their motivation as a teacher. This might lead them to construct more complex, sophisticated and concrete teaching philosophy.

Second, both student A and O had experienced their failures. They took participate in this course with their own ideas, perspectives, cultures, and individuality. Student A once almost gave up his professional career as a teacher, and student O got frustrated by herself, because they couldn't do as well as they had first expected. However, the teaching activities are full of pain, anguish and troubles and any teacher has more or less suffered such mental distress. Some secondary school teachers told me that they had anxiety of their teaching, especially in April every year. It is necessary for the two student teachers to face their feeling of not having succeeded in and/or having come up short "as a stepping stone for further development [Admiraal and Wubbel, p.322]."

Third, as is often the case with student teachers, as Trotman and Kerr indicates, they were also under the strong influence of their early life experiences [Trotman, & Kerr, p.159]. They look at theories and concepts of education, and also their experiences in school, without altering their existing beliefs and perspectives. They were not ready to transfer their knowledge into practice, while they have learned educational foundations. Their philosophy of teaching, for example, surly came from their experiences. The first philosophy of student A, which was being very strict during the class while in very friendly fashion during the break, came from his experiences to be taught by an earth science teacher of the high school. Student O mentioned giving the affection to students. This also came from her early experience. Their philosophy was always based on their encountering before.

Another example is that when preparing for the class, they didn't know how to prepare for the class. They only crammed knowledge described in the textbook, and websites at most. didn't grasp the main theme of every lesson as they hadn't done it when they were a secondary school students. This powerful influence of early life experiences obstructed their preparation and therefore, when they observed lessons, they didn't have their own ideas of how to teach the lesson. Preservice teachers' beliefs are tenacious.

Their early experiences are, of course, all important and foundations of their professional

career as a teaching professional. However, sticking to their narrow experiences, it was not easy for them to look back their new experiences deep enough to be aware of essential aspects, to create alternative methods and to find their new grounded philosophy. Leading them to examine such experiences, the role of teacher educators is to wide their perspectives and to encourage them to challenge their own “taken for granted” frames drawn from their early life experiences.

Last, through experiencing the cycle of reflection to some extent, they had showed their cognitive growth. They had used their failure as a stepping stone. They have done actions, have looked back on their actions, have been aware of essential aspects, and have created the alternative methods of action. Regarding their philosophical level reflection, student A had changed his belief on knowledge based lecturing to that on interactive lecturing to raise students’ interest. Student O once had her belief that the role of a teacher was to give students her/his affection, but she became aware of the importance of the organically connected subject matter knowledge. They had reflected their experiences and had earned their cognitive growth, which means that she/he had transformed her/himself. This time meeting another idea of teaching, their ideas became broadened, They were going to find the new philosophy of teaching.

About their practical level reflection, student A had a 10 minute lecture and reflected his teaching. He showed two pictures and explained them by himself, but found that students showed no interest. He was aware that only showing pictures didn’ t work and then created another method, which was to provide students with them and ask a question, “What is this picture of ?” before his explaining. Student O couldn’ t communicate with students. She tried to be positive every time but she couldn’ t. Then, she found her alternative method to go to the classroom during the break to speak to students.

As Admiraal and Wubbel mentiones, reflection “initially needs a clear focus that is later broadened to capture a new theme which in turn initially has a clear focus, but is later broadened into an endless succession of focusing on a critical issue of classroom life only to widen out to include other complexities of classroom and their contexts [Admiraal and Wubbel, p.323].” Their reflection during these eight months was just the beginning of their endless reflection. It would be expected that based on their reflection, they would capture the new theme, focus on a critical issue, and broaden their perspectives.

Table 1 Philosophical/Practical Reflection of Two Preservice Teachers

Philosophical/ Practical	Phase	Student A	Student O
Philosophical Level Reflection	Action/Trial	Being very strict during the class, while in very friendly fashion during the break (April) Providing future students with zest for living: a) the capability to cooperate with others, b) the capability to be inspired, and c) the capability to find her/his topic and learn by her/himself (June)	Giving the affection to students (April) Providing future students with the strong mentality to tackle the reality (May) Providing the abilities of critical thinking, having interests and questions, and collecting, sorting and analyzing information (August)
Philosophical Level Reflection	Episode 1		
	Action/Trial	Responded to a student's question	Tried to communicate with students
	Looking Back		Couldn't communicate with students
	Awareness of Essential Aspects		Realized that she was afraid of students and had lack of subject matter knowledge
	Creating Alternative Methods		Going to the classroom before the class begins to communicate with students
	Episode 2		
	Action/Trial	Circulated among students' desks, during the test	Prepared for class observations with internet and text books only
	Looking Back	Noticed those not having listened to the lecture did well.	Found her lack of subject matter knowledge

Awareness of Essential Aspects	Couldn't judge a student with a glance	Should have prepared with books on Japanese history
Episode 3		
Action/Trial	Gave a 10 minute lecture and handed out two pictures	Had Mock teaching
Looking Back	Noticed students didn't show any interest	Having a variety of answers and couldn't connect them with her conclusion
Awareness of Essential Aspects	Understood only providing pictures hadn't raised students' interest	Recognized that her question was very vague and she had organized the lecture depending on her one-sided assumption. So, classmates didn't understand what she tried to tell.
Creating Alternative Methods	Giving a question to students and leading them to imagine what the pictures are about.	

7. Implications

Study findings show that the two preservice teachers had faced difficulties in the real classroom setting. Also, although they had had some reflection, it didn't seem anything that drastically transformed them. They might have felt disoriented. In addition, I should mention the tough hurdle to get a teaching position in school. For example, the hurdle of an acceptance ratio was 1 in 20.8 for junior high school social studies teacher and 1 in 83.8 for high school social studies teacher of Hokkaido public schools¹¹. Because of this, they have spoken to themselves many times that "Am I really able to be a teacher?" As far as I know, student A once almost gave up his hope to be a teacher in September. Student O also discontinued her practical training once last school year, and this school year she had often said "The reality is different from the ideal." This means that although she still kept her hope to be a teacher, she didn't have her confidence to be a teacher, because of such high competitiveness. Oneday, she said to me:

Teachers (of the junior high school) have let me do a lot of things. (Omission) Since they have done so much for me...I am getting a sense of reality (to be a teacher).

Such half attitudes came not only from their lack of self-confidence or subject matter knowledge but also tough situation surrounding prospective teachers. How to support reflective thinking of student teachers in such a situation is the biggest problem for teacher educators.

In order to promote their self-directed learning, as Korthagen indicates, the strategy of gradualness should be chosen [Korthagen, p.13]. The strategy of gradualness has two aspects: "structure" and "safety [p.13]." When the teacher educator gives assignments, she/he can't leave student teachers alone. Initially, reflective process should start "with reflection on simple and short experiences [p.13]," for example, 10 minute lecture as student A did. During preparations, teacher educators should show possible choices. After student teachers picked up their choice and carry out, they should provide feedback. For the purpose of giving feedback, student teachers should be assigned to write journals, or log books. It is also suitable for teacher educators to know their contracts with schools, to monitor their schedules, and to regularly observe their practical training. Considering individual differences, they could provide student teachers with face to face individual guidance. Then, more and more decision making could be left to student teachers. At last, self-

¹¹ The Board of Education of Hokkaido Public Schools web site:

<http://www.dokyoi.pref.hokkaido.lg.jp/NR/rdonlyres/D185F2C1-111B-4D3C-94BB-02C2BD7D811A/0/h20senko2.pdf>

evaluation could be basic to reflective teaching. This is the aspect of structure.

The aspect of safety consists of acceptance, empathy and encouraging. No student teacher has self-confidence from the beginning. Thus, if student teachers feel that their actions and trials are always criticized, they will not learn to take responsibilities and increase their passive attitudes. In addition, "safety" depends on personal relationship between student teachers and the teacher educator. Teacher educators should keep close attention to their students, and be available when "the transition shock takes place [p.14]," especially for those needing the external support.

Last, however, this research is not answer for the question, "Are practical experiences of student teachers as beneficial as many teacher educators think?" Field based prospective teacher education doesn't have long history, especially in Japan while traditionally, lecturing has long been regarded as the main part of teacher education and all the more, field based teacher education has been lionized recently. This study therefore should be continued to watch closely how student teachers learn and find what is/isn't learned by them. Reflective thinking should take time and eight month research is not long enough. This is the reason why this research on two student teachers is to be extended into the second year.

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論文概要

日本における教師教育は分岐点に差し掛かっている。今までの大学における教師教育は現場の要請に応えられるものではなかったということを前提に、「実践的指導力」の養成が教職課程を開設されている全ての大学に求められている。しかし「実践的指導力」とはきわめて曖昧な概念である。現場の教員、教師教育を担当する大学教員、研究者がそれぞれの「実践的指導力」を追及しているのが実情である。

本研究では、「内省を通じた変わる力」を「実践的指導力」と定義づけ、2007年度に本学の開講講座である教職ゼミを履修した2名の学生の現場実習とその内省から、「変わる力」の獲得の過程を質的調査によって検証する。