Pre-service Teachers' Knowledge and Learning Process on Classroom English Activities through Reflective Cycles of In-class Activities and Discussion

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# Pre-service Teachers' Knowledge and Learning Process on Classroom English Activities through Reflective Cycles of In-class Activities and Discussion

授業内の省察的サイクルを通じた教員養成課程学生の コミュニケーション活動に関する知識と学習の過程

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## Introduction

This study aims to report an attempt to improve pre-service teachers' knowledge of learning process regarding classroom English activities through reflective cycles in a class of students preparing to become teachers. Eleven third-grade students, from non-Englishteaching majors at a university in Shizuoka, participated. The objective of this course is for students to attain greater proficiency in English mainly through communicative activities and debates as English teacher candidates. Focusing on their conceptual transformation, reflective essays on each communicative activity and their discussion in small groups, their own task implementation, and the final reports were examined. Their development of pedagogical content knowledge suggested that these experience using writing/speaking skills from the pedagogical viewpoint and reflective cycles can enhance teaching-relevant knowledge and skills for teacher candidates.

# Background

#### General Issues in Teacher Education Research

Under the circumstances that novice teachers have to face in their classroom, almost no one believes that their jobs are to effectively "deliver" just what they were taught in a preservice course. Rather, teachers are required to be "adaptive experts," who continue to explore new knowledge and can learn from experiences that they make with students and their colleagues (Akita, 2009, p. 46). At the same time, novice teachers must have attained some knowledge and teaching skills during their pre-service training period prior to actual teaching practice. Nonetheless, how they can develop their capabilities and grow into adaptive experts has yet to be elucidated fully in teacher education research. Also, no agreement has been reached among researchers and practitioners as to what pre-service teachers should learn in a teacher-training program.

Darling-Hammond (2006) points out there are three problems in particular in learning to teach: apprenticeship of observation, enactment, and complexity (Darling-Hammond, 2006, pp. 35-40). The first challenge is that "one cannot easily glean a deep understanding" just by "observing good teaching or experiencing it for oneself" (p. 36). In addition to that, students need to "participate in selecting goals, making preparation or postmortem analysis" (pp. 35-36). This applies to trial lessons or other similar activities in a teaching curriculum. The second problem suggests that "teacher education is too theoretical, by which teachers often mean they have not learned about concrete tools and practices that let them put into action the ideas they have encountered" (p. 37). As Darling-Hammond (2006, p. 37) states:

[Teachers-in-training] must also learn to present information clearly, lead discussions that really get at the ideas under study, manage discourse of many kinds, organize groups for learning and give them useful tasks they can do, manage student behavior, weigh difficult dilemmas and make quick decisions, plan respond to questions about the material they are teaching.

The third challenge is that "teaching is an incredibly complex and demanding task," and "helping new teachers appreciate the multidimensionality and simultaneity of teaching is clearly no easy task." (pp. 38, 40) One way to tackle this problem is to make use of case study methods, and potentially it will work in subject-specific program (Akita, 2009, pp. 59-60).

#### Trends in EFL Teacher Education Research

In the field of EFL (English as a Foreign Language) teacher education research, great emphasis has been put on teacher cognition and teacher knowledge (Tsui, 2011, pp. 24-29). The former has been defined in different ways, but usually means the study of beliefs, assumptions, values, and the ethical disposition of teachers as interrelated mental constructs, and its cognitive processes. According to Tsui (2011, p. 28), the latter has relatively recently gained attention amang researchers, and its focus "has been mostly on teachers' declarative knowledge about grammar," comparing native-speakers (NS) and non-native speakers (NNS) of the target language.

Wright (2002) identifies three domain of teacher knowledge about language, often called "language awareness," that teachers should have: the *user* domain, the *analyst* domain, and the *teacher* domain. Studying teachers' declarative knowledge about grammar is concerned primarily with the *analyst* domain. From the viewpoint of the *user* domain, however, that is related to a specific issue in EFL teacher education that NNS English teachers need to acquire a good command of English and "teacher-talk" in class. On the other hand, Jourdenais (2009, p. 652) points out, "[i]t is not enough that teachers be successful users of the target language; nor is it sufficient that they understand how the language itself works. They must

have a level of awareness of language that enables them to assess, analyze, and present it to learners in ways that will enhance acquisition." Nevertheless, "[o]ther aspects of the language system and language skills remain largely neglected" (Tsui, 2011, p. 28). "[F]ew studies have focused on the way in which L2 teachers are able to effectively represent subject matter knowledge to students, the difficulties students have in understanding how the language works, and how they could be helped" (Tsui, 2011, p. 34). Therefore, this article mainly focuses on the *teacher* domain, which "involves an awareness of how to create and exploit language learning opportunities, the significance of classroom interaction and of learner output" through a class practice in an English teacher training course (Wright, 2002, p. 118).

On what teachers' knowledge base should include Shulman (1987, p. 8 [2004, pp. 92-93]) identifies the following seven categories at the minimum:

- content knowledge;
- general pedagogical knowledge, with special reference to those broad principles and strategies of classroom management and organization that appear to transcend subject matter;
- curriculum knowledge, with particular grasp of the materials and programs that serve as "tools of the trade" for the teachers;
- pedagogical content knowledge, special amalgam of content and pedagogy that is uniquely the province of teachers, their own special form of professional understanding;
- knowledge of learners and their characteristics;
- knowledge of educational contexts, ranging from the workings of the group or classroom, the governance and financing of school districts, to the character of communities and cultures; and
- knowledge of educational ends, purposes, and values, and their philosophical and historical grounds.

Amongst these different kinds of teachers' knowledge pedagogical content knowledge (PCK) has attracted attention from teacher education researchers (see Tokuoka, 1995 and Hatta, 2009 for a detailed explanation of PCK) and been explored in various subjects, including social studies (Yano, 1998), science (Isozaki *et al.*, 2007), English for specific purposes (Hüttner & Smit, 2012), mathematics (Chamoso *et al.*, 2012), etc. One writer points out that "one of the main learning priorities for many novice teachers in their first years is how to manage the classroom context" (Farrell, 2012, p. 440). Moreover, it is obvious that pre-service teachers need to acquire a lot of content knowledge, but "the teacher's possession of a high level of subject matter knowledge is no guarantee that such knowledge will be used appropriately in the classroom" (Andrews, 2008, p. 209). Therefore, considering the *teacher* domain in pre-service period, what constitutes PCK in EFL teaching and how to encourage student teachers to develop it seem to be crucial.

PCK has been conceptualized both as an integrated model and a transformative model. The former views PCK as the conglomerate of content knowledge, general pedagogical knowledge, and knowledge of educational context, while in the latter model, PCK is distinct and transformed from these types of knowledge. This article takes a transformative view of PCK because "if PCK is no longer distinguished clearly from subject matter knowledge, it becomes difficult to define the type of knowledge uniquely the province of teachers" (Hüttner & Smit, 2012, p. 166). Also, what is more important to the study of teacher training program is the process that public theories (and other people's personal theories) affect, and become incorporated into, personal theories through practice and reflection on it (Jourdenais, 2009, pp. 652-653).

Thus, this article aims to report an attempt to improve pre-service teachers' knowledge of and learning process regarding classroom English activities through reflective cycles in a class of students preparing to become teachers In the following section, the paper explains the course design and the framework of reflective cycles, and discusser students' performance in detail so as to examine their learning and derive some implications for what pre-service teachers should learn in a teacher-training program.

| Lessons | Syllabus                              | Communicative Activities              |  |  |
|---------|---------------------------------------|---------------------------------------|--|--|
| 1       | Course guidance                       |                                       |  |  |
| 2       | Taska for huilding room ort           | Guided self-introduction              |  |  |
| 3       | Tasks for building rapport            | Interview and report                  |  |  |
| 4       | Tasks involving listing, sorting, and | Who am I: Looking for the topic       |  |  |
| 5       | classifying                           | Making inferences                     |  |  |
| 6       | Tasks involving matching and          | Spot the differences                  |  |  |
| 7       | comparing                             | Describing the pictures               |  |  |
| 8       | Storytelling tasks                    | Making a story by telepathy           |  |  |
| 9       | Sharing personal experience           | Story-telling                         |  |  |
| 10      | Problem-solving tasks                 | Who did what, Numbered Jenga          |  |  |
| 11      |                                       | Guess what: Quizzes and hints         |  |  |
| 12      |                                       | Story telling by Apples to Apples     |  |  |
|         | Projects                              | Game of Life with tongue twisters     |  |  |
| 13      | (students' task implementation)       | Who is it: Describing the pictures    |  |  |
|         |                                       | Making stories following keywords     |  |  |
| 14      |                                       | Acting in skits & guessing the titles |  |  |
| 15      | General Review of the Whole Course    | Teaching Pronunciation                |  |  |

## Table 1

| The course schedule | (the first semester in 2012) | ) |
|---------------------|------------------------------|---|
|---------------------|------------------------------|---|

#### Framework of the Course

#### **Reflective Cycles**

The course was an elective and intended mainly for third-year students in a teachertraining course at a university in Shizuoka. Eleven (9 female and 2 male) students, mostly from non-English-teaching majors but intending to acquire a certificate in English teaching in junior high and/or high school, participated. Table 1 shows the course schedule and the activities they engaged in.

The objective of this course is for students to attain greater proficiency in English mainly through communicative activities and debates as English teacher candidates. Basically, each class proceeded as follows: Students first participated in a communicative activity, using examples from Miura *et al.* (2006), Willis and Willis (2007), Samuda and Bygate (2008), and so on. After focusing their thoughts following the given agenda, which are intended to guide the meta-analysis of their performance and activities, they exchanged opinions about the activity from the perspective of teachers in small groups (e.g., "What kinds of skills/knowledge in English are required for this activity?" or "Do you think time limit is needed for this task?"). At the end, they were asked to write a 150-250 word report on the content of their discussion as an assignment (12 times at maximum). Each report was commented on up by the teacher and shared with other students. Using their L1 was not prohibited, but communicative activities and discussion were mostly conducted in English due to task specification and the students' involvement.

Therefore, they had an ample opportunity to use all four skills and receive feedback in a balanced manner. At the end of the course, they were required to submit a final paper on the communicative activities presented in class, reviewing what they learned.

These procedures were designed to virtually act as the reflective cycles through English use, to relate individual learning processes to collaborative knowledge building (see Figure 1; Akita, 2009, pp. 67-68). Based on this experience, students were required to devise and implement their own tasks in pairs (i.e. team-teaching for 20-30 minutes) in the later part of the course. In part, it aimed to solve the three problems Darling-Hammond (2006) points out, especially the problem of "enactment," within a teacher-training program as well as to make the above cycles meaningful. That is, each communicative activity and the analysis can be resource for constructing their own tasks.

After the task implementation in each lesson, students shared their opinions and wrote a 250-word report the same way as with the previous lessons. One thing that was different from usual was that they could receive immediate feedback and delayed feedback from their "students". In addition, key parts of their practice were recorded on video, and shared by the teacher and students on a closed SNS site so that they could check their performance and leave comments to each other outside of class.

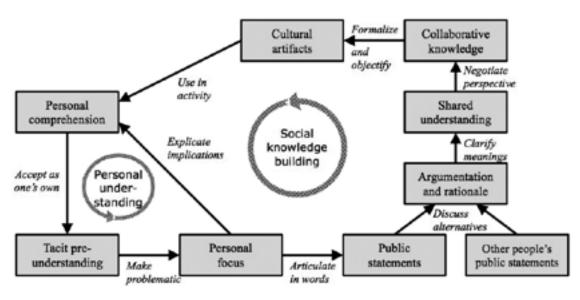


Figure 1. A diagram of knowledge-building processes (Stahl, 2006, p. 203).

| Table 2         |           |         |          |      |  |
|-----------------|-----------|---------|----------|------|--|
| Task parameters | (Willis & | Willis, | 2007, p. | 157) |  |

| 1. | Outcome  | open or closed? Interim goals: linguistic clues? Format specified: written? tabular? |  |  |
|----|--|--|--|--|
|    |  | spoken? Audience for end-product? completion point clear?                            |  |  |
| 2. | Starting points for task   | a text? A visual? A case study? A teacher story? Learner experience? Web             |  |  |
|    |  | research?  |  |  |
| 3. | Pre-task preparation   | with or without planning time? Priming stage: timing, input; free or guide           |  |  |
|    |  | planning? Teacher-led or learner-led? Written preparation: in note form or in full?  |  |  |
| 4. | Control of agenda and  | explicit steps, formats supplied? Time limits/deadlines/word limits? Mid-task        |  |  |
|    | task structure   | interventions? Degree of reference or written support?                               |  |  |
| 5. | Interaction patterns   | individuals, pairs, groups, teacher with whole class; roles of                       |  |  |
|    | and participant roles  | chair-person/writer/spokesman/language consultant/editor; one-way or two way         |  |  |
|    |  | information flow/long or short turns.  |  |  |
| 6. | Pressure on language 'pushing' output to achieve accuracy - prestige language (planned, rehearse           |  |  |  |
|    | production   | public) versus informal language (spontaneous, exploratory, private). Recording      |  |  |
|    |  | and transcribing learner interactions; scaffolding teacher feedback - negative and   |  |  |
|    |  | positive to encourage experimentation and complexity.                                |  |  |
| 7. | Post-task activities follow-up tasks to recycle texts; plus/minus report; audiences for report; repetition |  |  |  |
|    |  | of tasks (time-lag?); form-focused language work, evaluation.                        |  |  |

# Task parameters as leading transformation of their PCK

Before students implemented their own task, the following task parameters in Table2 were introduced as public theories about designing communicative activities. The activities they had engaged in were reorganized using these parameters and "the principles of gaps" (Miura *et al.*, 2006, pp. 70-92).

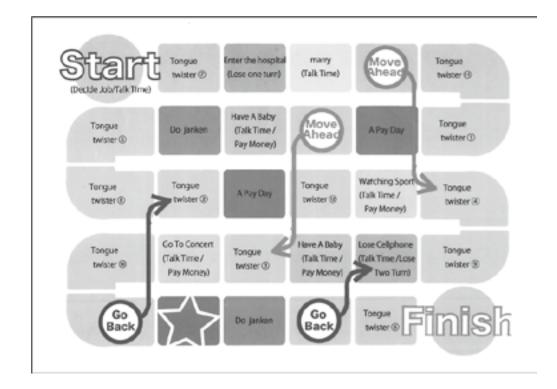


Figure 2. The game board the students made

## **Discussion and Implications**

As shown in Table 1, each pair was able to devise and implement well-thought out task in English. For example, one pair made a game of life using tongue twisters. Since all the pairs were required to take time to prepare all the necessary materials they prepared not only the game board and tongue twister sheet, as shown in Figure  $2 \ensuremath{$ and Figure 3, but also occupation cards (by which the amount of pay varied), bills, and roulette wheels. Moreover, they needed to prepare an oral introduction and teacher-talk in English to explain the rules and check how the game developed. Thus, though the activity was not at all based on the textbook they are going to use, they were able to experience the whole process of developing language learning materials including selecting goals and making preparation according to the actual conditions of the classroom.

Though each pair faced challenges in using

#### Tongue twister

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If you land tongue twister squares, you must say tongue
twister. Other people, please judge how was player's
tongue twister with cards. And you will get some money
equivalent for score.
DShe sells seashells by the seashore.(彼女は海岸で具織を笑る)
OShoes and socks shock Susan.(靴と靴下がスーザンにショックを
与天石)
@Seventy salions sailed seven swift ships. (70人の本貞が7集の真道
顧を思らせた)
彩Little Linda Lamb licks her lovely lips.(子弟のリンダが自体の影響
い目を話める)
②The witch wished a wicked wish.(東北が東京な聞いまたけた)
@How many cass can a canner can it a canner can can cans? (M
第三が缶を詰めるなら、缶第三は月前の缶を詰められるか?)
OHew many bagels could a beagle bake if a beagle could bake
bagels?(ビーグルナがペーグルを焼けるなら何様焼けるだろうか?)
Bin Hertford, Hereford, and Hampshire, hurricanes hardly ever
happen.(ハートフォードとヘリフォードとハンプシャーでは滅多にハ
リケーンは起こうない)
③The lovely swan silently glided on the silvery lake.(貝しい自由)
が静かに厳色の謎に意ました)
BThe rain in Spain stays mainly in the plain.(スペインの展送主に
平野に開る)
@Brown bees buzzed busily beside the bluebells.(単色い番がブル
- べルのそばで忙しくプンプンといった)
OI scream, you scream, we all scream for ice creams(アイスクリ
ーム!と私と思想たとみんなが毎ぶ)
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Figure 3. The tongue twister sheet
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English to carry ont all of the tasks involved in creating and implementing the activity their performance was actually quite good, and well-received by other students, as illustrated in the following feedback comments (originally written in English, and grammatical errors modified at minimum):

- "... I think their task is interesting. "The game of life" is very famous. But it was great that they used it as a task. I enjoyed this task. But it was difficult for me to say the tongue twisters, because I can't say the tongue twisters even if these were the Japanese ones. We need the skill to read the sentences and the skill to express our opinions. These skills are required for the tongue-twisters and talking about the topics."
- " [Their] lecture was also good. I noticed that if we play the game of life in English, we could get a good opportunity to use daily communication of English. The game of life is easy and simple, so it is effective for students to communicate in English happily."

At the same time, they reflected on their implementation as follows (originally written in English, grammatical errors modified at minimum, and underlines added):

- We considered the activity in which they can use English enjoyably. Then, we thought up "the game of life." We took care of some matters on this activity. We need to produce an enjoyable game. But we mustn't forget making chance all members speak English. So we need to think up small activities in every part of the game. Otherwise, there may be <u>a risk of being just a game.</u> Then, my partner thought up introducing tongue twisters. She said she would like to introduce this activity actually in classes of junior high school if possible. So we decided to consider activities using and making at the lesson of a junior high school. And we distinguished between original things and ready-made things on the teaching materials. For example, the game board and the job cards were original things, while money and the roulette wheels were ready-made things. Our thoughts were effective. When we showed the game board, everyone was interested in the activity. They enjoyed our activity and could use English exactly. We thought our activity was successful. <u>But we didn't care about the allotment of time for the activity</u>. So this activity was incomplete yet.
- ... We proposed in the class the activity that we considered by ourselves for the first time. I felt that it was difficult for us to make an activity and carry it out. … This time we proposed the activity that consisted of two elements: tongue twisters and the game of life. This activity aimed at making everyone speaks English and enjoys it. So I have satisfied that everyone in the class enjoyed this activity. However if this activity is presented to students in junior high school, I believe that it should be not only the one that delights them but also the one from which they can gain something (capability, knowledge and so on). I took in many elements to this activity. So, happily it became substantial. On the other hand, it tended to be unclear for what purpose students have to do so. So I felt that it was difficult to carry out the activities. When I implemented this activity, I found it difficult to explain the rules simply. If it is presented to students in junior high school, we have to prepare the explanation more carefully. In particular, I

think that visual supports could be effective for junior high school student (Playing along as a demonstration or using projector.) And I felt that the teacher must be an entertainer when presenting this activity. Learning requires entertaining. Otherwise, it will not continue. So I want to be a good entertainer.

These underlined comments could be considered as some beginnings of students' forming own PCK, triggered by this trial practice and the reflective cycles in the course. At least they assessed their achievement and suggested options for improvement on their own from the perspective of teachers.

Their reflective essays and the final reports seem to have showed that their writing abilities have gradually improved, even though it remains a matter of speculation and needs further quantitative and qualitative analysis. In the final reports, the minimum number of words was not specified, but students wrote relatively longer report than expected at the beginning (432.44 in average from 258 to 959 words). Again, some kind of conceptual transformation can be found from their reports, as one student wrote (grammatical errors modified at minimum and underlines added):

• Through the classes, I was able to learn various and creative activities. <u>Before taking</u> the class, I knew only a few warm-up activities. So, the given activities made me notice that activities are infinity and I can use many tools for activities.

I think one of the most impressive activities was <u>the activity that information gap was</u> <u>used</u>. A game of finding the mistakes were so interesting. When we did the game, I use many English words naturally to find mistakes. I think the game <u>can be a good chance</u> for students to experience that we can't communicate without using English words and we also can't tell about what we think to the others if we are too shy to speak in English.

The second impressive activity for me was the activity used 'Jenga.' I've never thought that I can use Jenga for an English activity. The activity is similar to the style of TOEFL, so I think it can be practice for TOEFL. It was the first time to use Jenga in English class, so I enjoyed the activity a lot. <u>Through the activity I was able to think that the tool for activity is not limited, so I can use various things as tools for English activities.</u>...

Thus, reflective essays on each communicative activities and students' discussion in small groups, their own task implementation, and the final reports suggest that while they had ample opportunities to practice using English, they also developed pedagogical content knowledge as English teacher candidates. "[N]ovice teachers need to develop skills which enable them to question, critique, and challenge the received knowledge of the field" "not as definitive or authoritative but as resources for constructing their own operational theories of classroom practice" (Hedgcock, 2002, p. 309; Jourdenais, 2009, p. 653). Further research and practice should be done to gain better understanding of what pre-service teachers should learn in a EFL teacher-training program, but such experience using skills from the pedagogical viewpoint and reflective cycles can enhance teaching-relevant knowledge and

skills for teacher candidates.

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