How Does English Proficiency Affect English Teaching Skills of Pre-Service Elementary School Teachers?

Mai Matsunaga

Abstract Matsunaga (2012) explored the effective training procedures as part of a class offered to university students in a teaching certificate program. Specifically, she examined the difference in benefit from offering participants one training session (control) in comparison to five sessions (experimental) on giving game instructions, a commonly used skill in elementary schools. The participants were rated on their ability to conduct two games in the beginning and at the end of the study. The results of ANOVAs implied that offering the experimental group five sessions helped to significantly improve their skills. Following these results, this current study examined the relationship between English proficiency and gains in the test scores of both groups. In other words, this study further clarified which of the two factors more directly affected the participants’ improvements: (a) the number of practice sessions or (b) English proficiency. The participants were divided into two groups according to their TOEIC scores: high and low. The results of ANOVAs and Mann-Whitney U tests suggested that English proficiency level did not affect their scores. These findings implied that the sessions, especially for the experimental group helped to improve the participants’ skills. Therefore, teaching skills in some areas can be developed through training sessions even when participants do not exhibit a high level of English proficiency.

Key words pre-service elementary school teachers, English activities, English proficiency, teaching skills

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果は、英語力の高くてない学生であっても、英語による指導力育成のための実践練習を通してある程度の指導力を身につけられることを示している。

キーワード　教職課程, 小学校英語活動, 英語力, 指導力
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1. Introduction

While English activities have been required for the fifth and sixth grade students in Japanese public elementary schools (MEXT, 2008a), the issue over the quality of teaching has repeatedly been one of the obstacles elementary schools have faced. In other words, more than 90% of English classes are taught by homeroom teachers (MEXT, 2008b) who are not necessarily trained English teachers. Therefore, the level of English teachers in terms of their English ability and teaching skills has been at the center of discussion among researchers (Butler, 2005; Higuchi, Kanamori, & Kunikata, 2005). In order to fulfill the objectives of English activities at the elementary school level (MEXT, 2008a), numerous previous studies (Butler, 2005; Higuchi, Kanamori, & Kunikata, 2005; Higuchi & Yukihiro, 2001) suggest that elementary school English teachers should demonstrate competencies regarding the following three aspects: (a) a relatively high level of English language ability, (b) appropriate teaching skills and knowledge related to the methodology of teaching English, and (c) a teacher attitude that is suitable for teaching English at the elementary school level. The author believes that these expected standards are necessary on a long-term basis for successful English teachers in Japanese elementary schools. However, meeting these standards will require the implementation of concrete government policies regarding elementary school English education and proper training courses for teachers, neither of which is currently available. Considering this reality, standards of competencies should be set to temporarily reflect the minimum levels required to conduct effective English classes, and also focus on English language ability, especially oral skills and teaching skills (Matsunaga, 2009b) since the current course of study suggests that most English activities be either listening or speaking-related (MEXT, 2008a).

Subsequently, in order to more effectively promote a higher quality in elementary school English education nationwide, training sessions based on a clear set of standards should be offered not only to in-service teachers but also to pre-service teachers, i.e., university students in teaching certificate programs. Researchers teaching
pre-service teachers at universities have proposed syllabi for methodology classes on teaching elementary school English (Egawa, 2008; Ito, 2010; Izumi, 2007; Koda, 2009; Yoshida, Kodera, Terada, & Honda, 2006). These syllabi often include both theoretical aspects such as objectives of English activities and methodology on teaching elementary school English, and practical aspects such as learning how to teach songs and chants, and experiencing micro-teaching. Moreover, some researchers (Hojo & Matsuzaki, 2010; Matsumiya, 2010) have suggested appropriate contents for methodology classes based on the feedback they have received from their students. According to the feedback, pre-service teachers tend to prefer learning practical skills such as English conversation skills and game instruction skills, to learning theoretical elements. These proposed syllabi and feedback from pre-service teachers suggest that universities should offer pre-service teachers ample practical training regarding English ability and teaching skills before they go into an actual classroom as a student teacher. Yet, to date, neither extensive research on the actual contents of practical training sessions for pre-service teachers nor empirical studies on the effectiveness of the contents of training sessions have been conducted.

Considering this situation, Matsunaga (2012) explored the effective training procedures as part of a methodology class offered to university students in a teaching certificate program. More specifically, the author examined the difference in benefit from offering participants one training session (control group) in comparison to multiple training sessions (experimental group) on giving game instructions, a commonly used skill at the elementary school level. The participants were rated on their ability to successfully and accurately explain a game in a hypothetical classroom situation. They were rated in the beginning and at the end of the study. The results of ANOVAs performed on the data from games 1 and 2 with groups (control and experimental) as an independent variable, and gains in the test scores as a dependent variable showed that the experimental group had significantly higher gains on both games 1 and 2 compared to the control group \((F(1,46)=18.20, p=.00\) for game 1, and \(F(1,46)=51.50, p=.00\) for game 2). These results indicated that allotting more time to actually practicing certain skills may better prepare pre-service teachers to conduct English activities at the elementary school level.
Following these results, the current study examined the relationship between English proficiency and gains in the test scores of the same data. In other words, this study further clarified which of the following two factors more directly affected the participants' improvements in their ability to give accurate game instructions in English: (a) the number of training sessions, or (b) English proficiency.

2. Method

2.1 Participants

The participants in the previous study (Matsunaga, 2012) were 49 second to fourth-year university students who were in two Methodology of Teaching English I classes taught by two different Japanese instructors, including the author, in the first semester in 2010. The methodology class is one of the required classes in an English teaching certificate program offered to literature, economics, and law majors at the university. The students in this program plan to teach English at a secondary level in the future, and some of them take additional courses to obtain a teaching certificate for a primary level as well. Although not all the students in this program plan to become a teacher at a primary level, the author thought learning how to give game instructions in English would help both prospective primary and secondary English teachers to improve their English instruction skills. The 49 participants were divided into two groups: 26 students who took the other instructor's class as a control group, and 23 students who took the author's class as an experimental group. The current study analyzed the same data from the previous study, focusing on the participants' English proficiency (TOEIC scores). In order to maintain a normal distribution of the data, one of the participants in the experimental group was deleted in the data analysis since she scored extremely low on games 1 and 2 on the post-test (18 on game 1, and 0 on game 2) mainly because she resorted to using Japanese in conducting game activities. In order to take the methodology class, the students are required to have a minimum TOEIC (the Test of English for International Communication) score of 450. The TOEIC scores of the participants ranged from 450 to 860, with the average score being 524. In this study, the 48
participants were divided into two groups according to their TOEIC scores: above the average, high (525-860); and below the average, low (450-520). There were 13 in the high level and 13 in the low level for the control group, and eight in the high and 14 in the low for the experimental group.

2.2 Materials

(1) Test Materials

Giving game instructions was chosen as the specific training element for this study because it had been one of the most typical skills required in English classes at the elementary school level (MEXT, 2009a). The same two games were chosen for both pre- and post-tests in which the participants were evaluated on their skills in giving game instructions in English as if to elementary school students. The two games were chosen from a revised list of games for elementary school students, which had been developed by the author and examined for its content validity by two experts on teacher training for elementary school teachers (Matsunaga, 2009b). The two games in this study were the secret word game and the can you — ? game (see test cards for the secret word game & the can you — ? game in Appendix A). These two games were chosen based on the level of difficulty so that the test included both easy (the secret word game) and difficult (the can you — ? game) sets of game instructions.

(2) Rating scales

For the purpose of setting the minimum levels of teaching skills for elementary school English teachers, the author had developed her own level description (rating scale) in order to evaluate a teacher's current level of teaching skills (Matsunaga, 2009a). The rubric had also been examined for its content validity by the above experts. The participants' performance in giving game instructions in this study was evaluated based on this rating scale.

The rubric employed the following four categories: (a) overall task fulfillment, (b) recognition of students' level, (c) use of instructional language, and (d) fluency. The first element, overall task fulfillment, evaluates participants' ability in conducting
activities in a comprehensible manner for their students, using appropriate English expressions, intonation, and pronunciation. The second element, recognition of students' level, evaluates participants' ability in adjusting their level and speed of English to those of their students. The third element, use of instructional language, evaluates participants' ability in employing appropriate classroom English. And the last element, fluency, evaluates participants' ability in conducting activities with a smooth and even tempo. The rating scale employed four levels within the range of 0% to 100%: (a) Level one (0% to 59%), insufficient level to assess; (b) level two (60 to 69%), limited professional competence; (c) level three (70 to 79%), minimum professional competence; and (d) level four (80 to 100%), professional competence, with level three being set as a satisfactory level (see level description on overall task fulfillment in Appendix B, see Matsunaga, 2009a for a complete rubric). In addition, each of the four evaluation categories accounted for the following allotment for a total of 100%: (a) overall task fulfillment, 70%; (b) recognition of students' level, 10%; (c) use of instructional language, 10%; and (d) fluency, 10%. Utilizing this rating scale, the participants' performance in giving instructions of games 1 and 2 was separately assessed based on the four levels in the range of 0% to 100%.

2.3 Procedures

(1) Instructional materials

Although taught by two different instructors, the two Methodology of Teaching English I classes, i.e., the control and experimental groups, shared the same syllabus and were conducted in virtually identical ways. The only difference between the classes was that the control group received one, 30-minute training session on giving game instructions in English, while the experimental group received five, 30-minute training sessions.

The experimental group received 30-minute practice giving game instructions in five classes from weeks four to eight (total of 14 weeks), and five different games were chosen for the sessions. The five games were selected on a frequency basis from the textbooks, English Notebook 1 and 2 (Eigo note 1, 2), which were distributed by the Ministry (2009a) and have been used at public elementary schools. The
five games were: (a) a bingo game, (b) a finger pointing game (*Yubisashi-game*), (c) a Japanese card game (*Karuta-game*), (d) a stereo game, and (e) a concentration game. In each session, working in groups of three to four people, the participants received a practice card, which included the information: the name, objectives, procedures, and Japanese instructions of the game. In creating five practice cards, the author referred to the teacher’s manuals for the textbooks (MEXT, 2009b). Then, the participants were given four minutes to prepare to act out the game instructions in English to other members in the group. After this group practice, the instructor (author) demonstrated the same game instructions as an example, focusing on instructional language and interaction with students. Following this example, the participants were given five minutes to improve their original instructions, and then they acted out the instructions again to other members in the group.

The participants in the control group practiced giving game instructions for one of the five prescribed games, the finger pointing game (*Yubisashi-game*), in the same week in which the experimental group also practiced the same game. The procedures for this one training session followed the same manner as those of the experimental group. For the other four times when the experimental group received training sessions, the control group spent more time on individual elements in the common syllabus such as learning theoretical aspects of English teaching.

(2) Pre- and post-tests

The participants took an interview-style practical pre-test in the second or third week of the class. The practical test consisted of the two games and was given individually by an instructor in his/her office for 15 minutes. In the practical test, a participant was given a test card for each game which included the information: the name, objectives, procedures, and Japanese instructions of the game; then, after four minutes of preparation time, the participant had to act out the game instructions in English as if to elementary school students. In addition, all practical tests were video-recorded with permission by the participants. In order to evaluate the tests, the instructor served both as an interviewer and a rater. After the initial test, the original interviewer reviewed the video-recording and rated it based
on the rating scale described in the above section, Rating scales. Then, the other interviewer reviewed the same video-recording and re-rated it in order to confirm the reliability of the first rating. In order to confirm the reliability of the first rating, inter-rater reliability of the two raters on the ratings of games 1 and 2 in the pre-test was separately examined. The results showed that the correlations on the ratings of both games between the two raters were statistically significant and were greater than or equal to .85, \( r(47) = .85, p < .01 \) for game 1, and \( r(47) = .89, p < .01 \) for game 2. These results indicated that the two raters agreed on the ratings on the pre-test to an extent which confirmed the reliability of the first rating. The same interview-style practical test was administered as a post-test with the same procedures in the 12th and 13th week of the class. In terms of the reliability of the first rating on the post-test, it was again confirmed (\( r(47) = .94, p < .01 \) for game 1, and \( r(47) = .95, p < .01 \) for game 2).

3. Results

In order to clarify which of the following two factors more directly affected the participants' improvements in their ability to give game instructions in English: (a) the number of training sessions, or (b) English proficiency, a 2 \( \times \) 2 ANOVA was conducted on game 1 and 2 to evaluate the effects of the number of training sessions (one for the control, and five for the experimental) and English proficiency (high and low TOEIC scores) on the gains from the pre- to post-test scores. The means and standard deviations for the score gains as a function of the two factors are presented in Table 1. The ANOVA results indicated no significant main effect for English proficiency, \( F(1,44) = .56, p = .46 \), partial \( \eta^2 = .01 \) for game 1 and \( F(1,44) = .13, p = .72 \), partial \( \eta^2 = .01 \) for game 2, and also no significant interaction between the number of training sessions and English proficiency, \( F(1,44) = .047, p = .83 \), partial \( \eta^2 = .01 \) for game 1 and \( F(1,44) = .39, p = .54 \), partial \( \eta^2 = .01 \) for game 2. On the other hand, the ANOVA results indicated a significant main effect for groups, yielding higher gains for the experimental group, \( F(1,44) = 17.96, p = .00 \), partial \( \eta^2 = .29 \) for game 1 and \( F(1,44) = 47.93, p = .00 \), partial \( \eta^2 = .52 \) for game 2. This group
main effect indicated that the participants in the experimental group tended to have greater improvements in the test scores than the control group, which had already been confirmed in the previous study (Matsunaga, 2012).

Considering the fact that the study had a limited number of participants (a total of 48), a Mann-Whitney U test was conducted in order to confirm the results of the ANOVAs. The Mann-Whitney U tests were conducted to evaluate the hypotheses that (a) English proficiency (high or low TOEIC scores) would not affect the gains for games 1 and 2, and (b) the experimental group would significantly outperform the control counterpart on the gains for games 1 and 2. The results were consistent with the hypotheses. The results implied that there was no significant difference between the high and low proficiency groups on the gains for games 1 and 2, $z = .09, p = .93$ for game 1, and $z = .94, p = .35$ for game 2. The high group had an average rank of 24.69 and the low group had an average rank of 24.35 for game 1, and 26.07 and 22.48 respectively for game 2. The results also indicated that there was a significant difference between the control and experimental groups on the gains for games 1 and 2, $z = 4.42, p = .00$ for game 1, and $z = 5.33, p = .00$ for game 2. The control group had an average rank of 16.88 and the experimental group had an average rank of 33.50 for game 1, and 15.23 and 35.45 respectively for game 2.

In sum, these results suggested that English proficiency (TOEIC levels) did not significantly affect the gain scores on games 1 and 2 of the control and experimental groups. And these findings helped to answer the research question: participation in the training sessions, especially for the experimental group (five sessions) affected the participants’ improvements in their ability to give game instructions, whereas the participants’ level of English proficiency did not.

<table>
<thead>
<tr>
<th>Table 1. Means and standard deviations of gain scores of high and low groups in control and experimental groups (Matsunaga)</th>
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<tr>
<td>Game 1</td>
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<td>Game 2</td>
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4. Discussion and Conclusion

Researchers (Egawa, 2008; Ito, 2010; Izumi, 2007; Koda, 2009; Yoshida, Kodera, Terada, & Honda, 2006) have proposed syllabi for methodology classes of teaching elementary school English, and these syllabi tend to include both theoretical and practical aspects. Moreover, some researchers (Hojo & Matsuzaki, 2010; Matsumiya, 2010) have suggested appropriate contents for methodology classes based on the feedback they have received from their students. According to the feedback, pre-service teachers tend to prefer learning practical skills to learning theoretical elements. Although their ideas undoubtedly provide us with a valuable source of insight, little empirical effort has been made to examine the effects of their class contents in improving the teaching skills of pre-service teachers. In response, Matsunaga (2012) explored the effectiveness of multiple training sessions on giving game instructions, one of the typical skills required at the elementary school level. In the study, the control group received one, 30-minute training session whereas the experimental group received five, 30-minute training sessions. The results of ANOVAs implied that offering the participants five training sessions (the experimental group) helped to significantly improve their skills in giving game instructions.

Following the results in the previous study, this study examined the relationship between English proficiency, measured by the TOEIC, and the gains in the test scores of the control and experimental groups. In other words, this study further clarified which of the following two factors more directly affected the participants’ improvements in their ability to give accurate game instructions in English: (a) the number of practice sessions or (b) English proficiency. The results of statistical analyses suggested that English proficiency level (TOEIC scores) did not affect participants’ gain scores to a statistically significant degree. The findings implied that the training sessions, especially for the experimental group (5 sessions) helped to improve the participants’ game instruction skills. Therefore, teaching skills in some areas such as giving game instructions can be developed through multiple training sessions even when participants do not exhibit a high level of English proficiency. Although
it is obvious that, in the long run, a successful pre-service teacher should have both proper English ability and teaching skills, the results in this study indicated that allotting more time to actually practicing certain skills may better prepare pre-service teachers with limited English proficiency to conduct English activities. This finding may be encouraging to pre-service elementary school teachers who usually have little confidence in their English ability and, therefore, convince themselves that they cannot teach English well.

The following limitations should be considered when interpreting the data in this study. First, this study had only a limited number of participants (a total of 48 participants), and therefore, the data may not be statistically valid. However, the author believes that the data can show an overall relationship between English proficiency and the effectiveness of training sessions on giving game instructions. Second, this study covered only one typical component of teaching skills, giving game instructions, and resulted in restricting the results only to this area. Ideally, future research should examine different areas related to English or teaching skills such as classroom English for their effectiveness on improving skills of pre-service teachers, and their relationship to English proficiency. Finally, this study focused on preparing pre-service teachers in a teaching certificate program to conduct game activities, but future studies should also explore ways to examine the lasting effects of these training sessions on the participants after they become in-service teachers, possibly through surveys or follow-up interviews. The author hopes that an accumulation of more empirical data of this kind will help improve the development of classes in teaching certificate programs, making program contents more practical and effective for pre-service elementary school teachers.

Note

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How Does English Proficiency Affect English Teaching Skills of Pre-Service Elementary School Teachers? (Matsunaga)

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Appendix A (A Translation of the Test Cards, Matsunaga, 2009b)

Game 1: Secret Word Game

Objectives: Students will learn names of occupations, and will be able to repeat them after the teacher.

Style: listening game, conducted in pairs

Prepared materials: Picture cards of various jobs, an eraser

Procedures:
1. Students work in pairs, sitting face to face. Each pair puts an eraser between them.
2. The teacher says one of the occupation names on the board, and the students repeat it after the teacher. However, when the teacher says the secret word, students should not repeat the word. Instead, they have to pick up the eraser. Those who grab the eraser, earn 1 point.

Test criteria for giving instructions: An interviewee must include the following instructions. He/she is also expected to effectively use the prepared materials and appropriate gestures.

Required instructions: (the following instructions are given in Japanese except for 1, 6, & 7.)
1. Let’s play the Secret Word game!
2. Work in pairs.
3. Sit face to face with your partner. Then, put an eraser between the two of you.
4. Repeat the word after me.
5. But, when I say the secret word, “carpenter,” do not repeat it. You must pick up the eraser! (end of the test)
6. You get the eraser, and you get one point.
7. You get more points, and you are the winner.

Game 2: Can You — ? Game

Objectives: Students will be able to ask and answer questions, using “Can you — ?” “Yes, I can. / No, I can’t.”

Style: interview game, conducted in pairs

Prepared materials: a worksheet, which details five people and six things each person can/cannot do

Procedures:
1. Students work in pairs, sitting face to face. Each student chooses who he or she will become from the five people on the worksheet, but does not tell the partner his or her choice.
2. The students in pairs ask and answer questions, using “Can you — ?” “Yes, I can. / No, I can’t.” The student who can guess who his or her partner is with
fewer questions will be the winner.

**Test criteria for giving instructions:** An interviewee must include the following instructions. He/she is also expected to effectively use the prepared materials and appropriate gestures.

**Required instructions:** (the following instructions are given in Japanese, except for 1 & 7.)
1. Let’s play the Can You — ? Game!
2. Work in pairs, and sit face to face with your partner.
3. Look at your worksheet. Choose one person you want to be.
4. But, do not tell your partner who you are.
5. Ask and answer questions, using “Can you —?” “Yes, I can. / No, I can’t.”
6. When you know who your partner is, ask your partner “Are you —?”
   (end of the test)
7. Ask fewer questions, and you are the winner.

*Note.*
In the process of creating the above two test cards, the author referred to the game activities introduced in 齊藤栄二・竹内理（編），2007, in References.
### Appendix B (Level Description on Overall Task Fulfillment, Matsunaga, 2009a)

<table>
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<tr>
<th>Levels</th>
<th>Descriptions</th>
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<tr>
<td>4</td>
<td>Very competent in teaching English. When explaining how to perform a game, can briefly explain it, effectively using picture prompts or gestures, including all the necessary information. When performing a model dialogue, can explain the situation well, effectively using picture prompts or gestures, with appropriate intonation and pronunciation.</td>
</tr>
<tr>
<td>3</td>
<td>Competent in teaching English. When explaining how to perform a game, some pausing or hesitation is evident, but can explain it well enough for students to carry out the game, using picture prompts or gestures, including most of the necessary information. When performing a model dialogue, some pausing or hesitation is evident, but can explain the situation, using picture prompts or gestures, and use acceptable intonation and pronunciation well enough for students to follow.</td>
</tr>
<tr>
<td>2</td>
<td>Only marginally competent in teaching English. When explaining how to perform a game, pausing or hesitation is evident. Trouble explaining the game instructions well enough for students to carry out the game, missing some necessary information. When performing a model dialogue, pausing or hesitation is evident, and trouble explaining the situation. Errors in intonation and pronunciation in a dialogue are evident. Cannot be a good model for students.</td>
</tr>
<tr>
<td>1</td>
<td>Not competent in teaching English. When explaining how to perform a game, pausing or hesitation is evident, and it is almost impossible to explain the instructions well enough for students to carry out the game, missing much of the necessary information. When performing a model dialogue, pausing or hesitation is evident, and almost impossible to explain the situation. Difficult to read a dialogue aloud, with many errors in intonation and pronunciation. Impossible to be a model for students.</td>
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</table>

*Note.* The teaching skills rubric consists of four categories: Overall task fulfillment, recognition of students’ level, use of instructional language, and fluency. Each category consists of four levels: Level 1, insufficient level to assess; level 2, limited professional competence; level 3, minimum professional competence; and level 4, professional competence.