

# Effects of Learners' English Proficiency Level in Learning English Prepositions through the Schema-Based Instruction

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## Abstract

The purpose of this paper is to compare the efficiency of the core schema-based instruction (SBI) in learning English prepositions between two groups that were placed depending on learners' level of English proficiency. The SBI in the present study refers to a way of teaching in which the schematic core meaning of a given lexical item is provided. This is essentially different from the translation-based instruction (TBI) in that the SBI, which takes cognitive linguistics (CL) as its theoretical basis, provides learners with a single abstract core meaning in vocabulary learning, whereas the TBI provides a list of several meanings and learners memorize it without a chance of paying attention to the semantic connection among its meanings. The efficiency of the SBI in comparison with the TBI has been investigated in the previous studies with high expectation, but not all of them have shown its significant achievement over the TBI. For this reason, several researchers have pointed out that the effects of the SBI may be influenced by learners' English proficiency level (e.g., Cho, 2016; Imai, 2016). However, this issue has not been fully explored empirically. The participants of this study, 41 students at a technical college in Japan, learned the six English prepositions (*at, in, on, to, for, with*) in accordance with the SBI. Then the participants were divided into two groups depending on the results of their TOEIC Bridge scores that they took about one month before this study. In order to assess the difference in efficiency between the two groups, pre- and post-tests targeting the six prepositions were used. The results of the pre- and post-test scores and *t*-tests suggested that the SBI worked more effectively for the learners with higher English proficiency than the ones with lower English proficiency.

**Keywords:** cognitive linguistics, core schema, English proficiency level, schema-based instruction

## 1. Introduction

Since cognitive linguistics (CL) has become one of the most influential linguistic disciplines, the research that attempts to apply the CL perspectives to English teaching, or CL approach, has gathered a lot of attention. This research field is called applied cognitive linguistics (Arakawa & Moriyama, 2009), and the research outcome in CL has been expected to be beneficial in English teaching and learning in a new way (Littlemore, 2009). The CL approach involves its basic perspective, i.e., the cognitive process governing language use and linguistic knowledge is not essentially different from the other knowledge in mind (Langacker, 2008). Thus the CL approach contains a cognitive view in its explanations and brings us a great deal of enlightenment that is different from the traditional translation-based instruction (TBI), where learners memorize the meaning of words or phrases through translation in their mother language, generally in a piecemeal fashion. The research on CL approach has started to be accumulated both theoretically (e.g., Littlemore, 2009; Tanaka, Sato & Abe, 2006; Tyler, 2012) and empirically (e.g., Akamatsu, 2010a, 2010b; Azuma & Littlemore, 2010; Boers, 2000a; Cho & Kawase, 2011, 2012; Fujii, 2011, 2016a, 2016b; Gao, 2011; Imai, 2016; Morimoto & Loewen, 2007; Sato, 2015; Yasuda, 2010). These studies have shed light on its effectiveness and problems. One of the new findings gained from these previous studies is that the CL approach could be effective in some grammatical or lexical items, but not in all the items (Cho, 2016; Imai, 2016). For example, Cho investigated the effectiveness of the CL-motivated schema-based instruction (SBI) in learning English prepositions and showed that the SBI did not always work effectively in every usage. Then she argues that the CL-motivated schematic representation does not seem to work effectively for learners at a beginner or elementary level. This issue regarding the relationship between learners' level of English proficiency and the efficiency of the SBI, however, has not been fully

investigated empirically and needs to be pursued. If learners' English proficiency level is an important aspect with regard to the SBI, then some pedagogical implications for the SBI can be obtained such as providing scaffolding for beginning learners.

On the basis of the above situation, this paper attempts to explore whether learners' level of English proficiency makes an observable difference when the CL-motivated SBI is conducted in learning English prepositions. As the CL-motivated SBI, the present paper adopted the core theory (Tanaka et al., 2006), and the six English prepositions (*at, in, on, to, for, with*) were employed as target material. The learners in the present study were 41 Japanese learners of English, aged 15 to 16, at a technical college in Japan. These learners belonged to one and the same class, and received the identical SBI by the researcher. Then they were divided into about half according to their TOEIC Bridge test scores. Then the efficiency of the SBI was compared between the upper group and the lower group.

### 1.1 The Core Theory

The core theory was proposed by Tanaka et al. (2006) and is expected to contribute to language learning and teaching in a unique way. According to Tanaka et al., the core meaning is the greatest common meaning that a given lexical item possesses in all its senses and the best exemplar of the usages. As in Figure 1, the core can be depicted as an apex of a semantic circular cone, which shows that it is abstract and de-contextualized. The base of the cone represents the range of meaning that it covers. The larger the bottom circle area is, the higher the apex of a cone becomes. The core placed in the higher position means that it is more abstract. Several small circles on the bottom of the cone represent context-sensitive individual senses and some of these are categorized under some of more abstract trans-contextual senses, represented as A, B and C in circle in the figure. These trans-contextual senses are rolled up together as the core meaning. The premise of this theory is that even if a given word has many usages that require many types of translation, as long as the word is expressed in one form, there must exist a single abstract core meaning underlying all those senses.

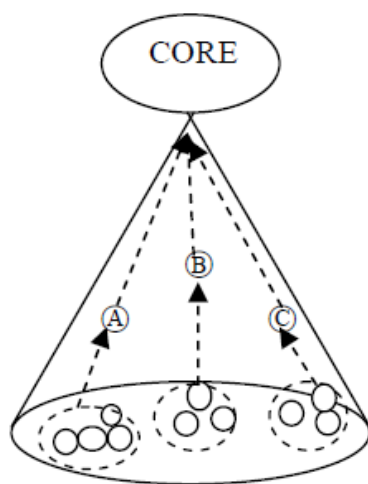


Figure 1. Core as an apex of a semantic circular cone (Tanaka et al., 2006, p. 8)

Thus the core is an abstract and context-independent notion, and the meaning is determined as a result of context modification, giving out some senses represented as sense 1, sense 2, or sense  $n$  in Figure 2. Various senses in each word can be derived from a single core which serves as a semantic base.

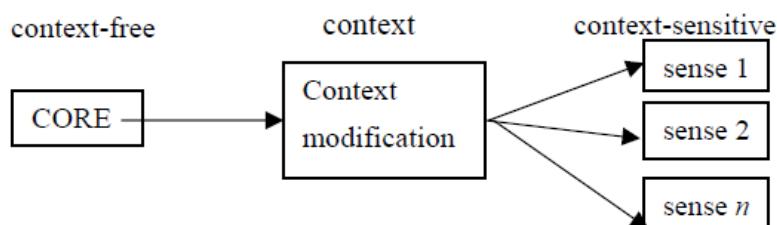


Figure 2. Core and context modification (Tanaka et al., 2006, p. 8)

The polysemous verb *take* serves as a good example to illustrate the mechanism as to how each sense is determined from the core through context modification. The verb *take* most likely means “swallow” in the sentence *John took some pills*. However, depending on the additional contextual information, the meaning of the verb differs as in the following sentences:

- 1) John took some pills and got a stomachache.
- 2) John took some pills and put them on the table.
- 3) John took some pills and got arrested.
- 4) John took some pills to his mother.

The sense of the verb *take* in 1) is probably “swallow,” and the ones in 2), 3) and 4) would be “seize,” “steal,” and “carry” respectively. This indicates that the meaning of *take* is not fixed, rather, indeterminate. In other words, these examples show that the verb *take* has its core meaning, but each sense can change depending on each context, not the one that is determined on its own. These senses are fixed through context modification and “swallow,” “seize,” “steal,” and “carry” are the examples of sense 1, sense 2, and sense *n* in Figure 2. According to Tanaka (2011a), the descriptive core meaning for *take* is “a movement of OBJECT into the HAVE space (prototypically by hand),” where the HAVE space refers to one’s possessional space or territory. Thus, a word or word concept does not stand alone in isolation of other words or other concepts, but rather it is linked semantically with others to produce a semantic network.

As Tanaka et al. (2006) state, the concept of core is based on the concept by Bolinger (1977), “one form for one meaning and one meaning for one form” or “different forms, different meanings.” Bolinger shows his view over the relationship between form and meaning as “[a] word form is not a container into which different and unrelated senses can be put randomly, but one which contains related senses.” Tanaka et al. (2006) take this idea as their theoretical foundation and discuss that there should be a single underlying common meaning as long as a given word is represented in the same form. This single underlying common meaning is termed as the core meaning in the present paper. On the basis of these features of core, it is expected to assist learners in a way that is different from vocabulary teaching through the TBI or the rote learning.

Another key term which must be explained is the core schema. This refers to a schematic representation where its core image is depicted. The schema is intuitively appealing in that learners can see the difference of the core meaning visually. For example, Tanaka, Takeda and Kawade (2003) show Figure 3 as the core schema for the verb *take*. This figure is a schematic representation for the core meaning of *take*, i.e., a movement of OBJECT into the HAVE space (prototypically by hand). The core schemas are sometimes simplified with a purpose of delivering its image to learners more directly. It is expected that the core meaning or the core schema can help learners understand polysemous words more essentially and intuitively and therefore retain the meaning for a longer period of time.

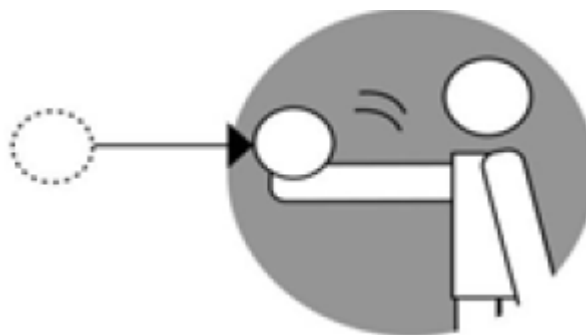


Figure 3. Core schema for *take* (Tanaka et al., 2003, p. 1694)

### 1.2 Literature Overview

Research on the effectiveness of the CL approach is mainly divided into two types, i.e., theoretical research (e.g., Chen, 2009; Fujii, 2014; Littlemore, 2009; Tanaka et al., 2006; Tyler, 2008, 2012) and empirical research (e.g., Akamatsu, 2010a, 2010b; Boers, 2000a; Cho & Kawase, 2011, 2012; Morimoto & Loewen, 2007). The theoretical contrivances from CL that have been applied to English teaching in the past studies are mainly divided into two groups, i.e., the conceptual metaphor group and the core meaning group. CL holds that metaphorization is a natural feature of language, and thus conceptual metaphor proposed by Lakoff and Johnson (1980) (e.g., HAPPY IS UP, SAD IS DOWN) or conceptual manipulations including metaphor or metonymy have been applied to explain the reasonableness of the collocation of words or the existence of some word formation (e.g., Azuma & Littlemore, 2010, Boers, 2000a, 2000b; Deignan, Gabryś & Solska, 1997; Gao, 2011; Lazar, 1996; Yasuda, 2010; Zoltán & Szabó, 1996). The other group uses the core meaning or core schema<sup>1)</sup> (e.g., Akamatsu, 2010a, 2010b; Cho & Kawase, 2011, 2012; Fujii, 2011, 2016a, 2016b; Sato, 2015; Strong, 2013; Verspoor & Lowie, 2003; Wijaya, 2014). The research results from these two groups seem rather contrastive. While most of the studies in the former group have offered benefits (e.g., Azuma & Littlemore, 2010; Boers, 2000a; Deignan, Gabryś & Solska, 1997; Yasuda, 2010; Zoltán & Szabó, 1996), some of the studies in the latter group have not brought about its higher achievement than the traditional TBI (e.g., Akamatsu, 2010a, 2010b; Morimoto & Loewen, 2007; Sato, 2015).

To illustrate some of the studies more specifically, Akamatsu (2010a) examined the effectiveness of a CL approach in improving the Japanese learner's knowledge of polysemous English prepositions (*at*, *in*, *on*). In his experiment, learners at a university studied the target prepositions, using either the materials focusing on the core and peripheral senses of each preposition or those listing the definitions and usages of each preposition from a bilingual dictionary. These two groups are not different in their English proficiency level based on the results of the TOEFL scores. Before and after the learning stage, an original test developed to evaluate the participants' knowledge in usage of the target prepositions was administered. Results showed no observable advantages of learning the core and peripheral senses of the prepositions over the TBI group. For these results, he suggests two potential reasons: the difficulty in learning the peripheral senses of a polysemous word and first-language effects on conceptualization. He also argues that learners have already had some prior knowledge in the target prepositions and restructuring of prior knowledge that had made through translation was hard to bring about.

The similar discussion was made by Cho (2016). She conducted an experiment targeting the three English prepositions (*at*, *in*, *on*) to examine the efficiency of a CL schematic approach to Japanese learners of English at a university. Results showed the observable effectiveness of the approach on the retention for a longer period of time. She discussed that the possible cause of this effectiveness was in whether learners could change their concept of the target prepositions by the schematic explanations. The discussion in common with Akamatsu (2010a) and Cho is the difficulty of changing learners' prior knowledge that has already been formed mainly through translation when schematic explanations are given. Cho also assumes that schematic explanations may work more effectively to learners at a high English proficiency level than to those at a beginner level. Imai (2016) is in line with Cho. He argues that explanation based on the CL perspectives is probably more appropriate for learners who already have general cognitive ability and are enrolled in national, public, or private universities that are generally regarded as intermediate or advanced level.

From these previous studies, several suggestions are obtained. First, the SBI has not always shown its effectiveness over the traditional TBI. Second, the difficulty of restructuring their prior knowledge may serve as

a reason. Third, restructuring prior knowledge may be influenced by learners' English proficiency level or cognitive ability. On the basis of these suggestions, the current study aims at giving an insight into the third point, i.e., that the cognitive restructuring process may be influenced by learners' English abilities. Therefore, the research question to be explored in this study is as follows: Does learners' English proficiency level make an observable difference with respect to understanding the meaning of English prepositions when the CL-motivated SBI is conducted to Japanese learners of English at a technical college?

## 2. Method

### 2.1 Participants

A total of 41 students participated in this study. All the participants were Japanese technical college students majoring in engineering, aged 15 to 16, and they had received formal English education for approximately 3.5 to 5.5 years at the time of the study. The participants were from one and the same class, and they received the identical instruction in the present experiment. This study was conducted in December, 2013.

### 2.2 Materials

Six English prepositions (*at, in, on, to, for, with*) were chosen based on the textbook the participants used at the time of the study. The core schemas for the six English prepositions were excerpted from Tanaka (2011b) as shown in Figure 4. According to Tanaka, the descriptive core meanings for these are, indicating a point or place (*at*), being in the space (*in*), touching something (*on*), facing something (*to*), starting or moving for something (*for*), and being with something (*with*). These schemas are simplified for an educational purpose but depicted to be intuitively delivered. The reasons why prepositions were chosen as material were that they are highly polysemous and that various senses in each preposition are in many cases semantically motivated with metaphor or metonymy. In the CL framework, metaphor and metonymy are considered as the fundamental processes of meaning extension in polysemous words (Lakoff & Johnson, 1980; Langacker, 1987, 2008). Since core schemas are based on the CL perspectives, it is expected that learners are relatively easy to understand the schemas of polysemous prepositions by manipulating one of their general cognitive processes, i.e., metaphoric or metonymic cognitive processes.

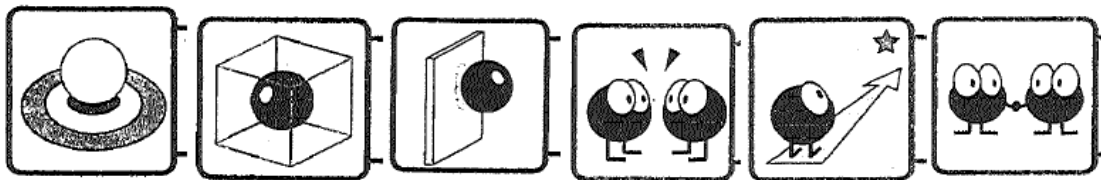


Figure 4. Core schemas of *at, in, on, to, for, with* (from left) (Tanaka, 2011b)

### 2.3 Tests

The test used for this study consisted of 5 questions for each preposition, 30 questions in all and took a fill-in-the-blank style. One blank was provided for each of the 30 questions with the Japanese translations and the six prepositions were provided on the test sheet so that the participants could choose the most appropriate preposition to fit into each blank of the 30 sentences. The question items with the target prepositions and their sentences were chosen from the simple ones among frequently used phrases or sentences on the TOEIC test based on Kawakami (2003). The following sentences in 5) and 6) are the examples of the test (see Appendix A for all the test items). The test was administered two times: before the experimental treatment (pre-test) to investigate the difference in their acquisition before instruction, right after the treatment (post-test) to see the influence of the SBI. The two testing sessions were identical, except for a varying order in the presentation of test items.

5) 君の探していたファイルはこれ？

Is this the file you were looking ( )?

6) 来年の予算請求はもう提出した？

Have you handed ( ) the budget request for next year?

WORD BOX: at / in / on / to / for / with

#### 2.4 Procedure and Analysis

The study consisted of the following three stages: pre-test, learning, post-test.

First, pre-test was administered. No explanation about the test or the prepositions had been made in advance. The administration time was approximately 15 minutes. The answer sheets were collected without giving them the right answers or grading their test sheets.

Second, right after the collection of pre-test, the participants made a group of 4 and were instructed to consider and discuss in a group what the underlying meaning for each preposition is, referring to the example sentences written on a sheet of paper. Five illustrative example sentences for each preposition, 30 sentences in all, were given to the participants, all of which were the same ones used on pre- and post-tests. Then they were instructed to write the core meaning on a sheet of paper either in words or pictures. Group work and discussion were employed in the present study in order to create an opportunity to consider the core meaning on their own. If core schemas are simply given to learners without a chance of reflecting on the semantic relationship between the core and its contextualized senses, the learners are likely to accept the schema as something inflexible that serves as a single norm. However, as one of the most influential CL figures Tomasello (2003) argues, in the CL framework, language is thought to be learned through a usage-based process and thus schemas are gradually built with a lot of interactions with concrete examples. Thus the schema is considered as something flexible and fuzzy which is entrenched through a massive amount of exposure. Since the notion of the core is based on the CL research outcome, it is plausible to assume that the SBI becomes more efficient if it is employed in a way that keeps the language learning concept of CL. As a possible bottom-up learning way under an EFL (English as a Foreign Language) circumstance, group work discussion was adopted in the present study<sup>2)</sup>. After the process of having the participants consider the core meaning through discussion, one student from each group was asked to share his or her core image by writing or drawing it on the blackboard and by explaining it to the class (see Appendix B as the examples). After the stage of sharing, the core schemas for the six prepositions (Figure 4) were provided along with each core descriptive meaning in a form of handout. Brief explanations about the core schemas were given by the researcher to enhance the image. The treatment time of the learning stage was adjusted to take approximately 30 minutes.

Third, post-test was administered. The test items were identical with the ones in pre-test except for the order of presentation. The administration time was approximately 15 minutes and the students graded their answers with their partners. Then the test sheets were collected.

Table 1 shows the brief procedure of this study.

Table 1. Procedure of the study

Stage 1: Pre-test (15 min.)
Stage 2: Learning (30 min.)
1. Sample sentences were provided
2. Group work
3. Sharing the image
4. Core schemas were provided
5. Teacher's brief explanation
Stage 3: Post-test (15 min.)

With regard to the analysis, one point was given for each correct answer, and the total possible score was 30 for each test. The class was divided into two groups according to the results of TOEIC Bridge, standardized English proficiency test with a full score of 180 that they took approximately one month before the study. The upper group (UG) consisted of the participants whose TOEIC Bridge scores were above 126 while the lower group (LG) consisted of the participants whose TOEIC Bridge scores were below 124. The range of the TOEIC scores of the UG is 165-126 and the average of the total TOEIC Bridge score is 134.7 while the range of those of the LG is 124-100 and the average score of the LG is 115.6. The number of the participants of the UG is 21, and that of the LG is 20. In order to compare the relative effectiveness between UG and LG on the comprehension of L2 English prepositions, *t*-tests were performed with the test scores. The alpha level was set at .05 for the statistical

analysis.

### 3. Results

On pre-test, the UG is approximately 2.46 point higher than the LG in its mean value, and a statistically significant difference was observed between the two groups ( $t(39) = 2.06, p = .046$ ). On post-test, the gap widened to 4.45 in its mean value, which also showed a statistical significant difference ( $t(39) = 4.42, p = .0001$ ). With regard to the difference between pre-test and post-test, the gain of the UG was 3.91 whereas that of the LG was 1.92. The difference was significant in the UG ( $t(20) = 5.61, p = .000$ ) whereas it was not significant in the LG ( $t(19) = 1.63, p = .119$ ) between pre- and post-test scores.

Table 2. Descriptive statistics of pre-test and post-test scores

	<i>M (SD)</i>	
	Pre	Post
UG ( $n=21$ )	14.71(3.35)	18.62(3.58)
LG ( $n=20$ )	12.25(2.50)	14.17(2.75)

### 4. Discussion

From the results in Table 2, several findings were suggested. First, the participants in the UG showed a better understanding in English prepositions than the LG participants on both pre- and post-tests. This seems a natural consequence because the UG learners are those who were at a higher level in their English proficiency test scores and comprehension of the target English prepositions is included in their command of English. However, in light of the fact that all the test items were used as materials in a group discussion, it can be said that the gain from pre-test to post-test was not as large as expected for both groups because the gain of UG and LG was 3.91 and 1.92 respectively.

This seems to involve the difficulty of restructuring the prior knowledge (Akamatsu, 2010a). As the target prepositions were all frequently-used and familiar words, the learners had already had some prior knowledge in the target prepositions although their knowledge was not sufficient to allow for proper use as the pre- and post-test scores showed. The SBI in the present study was conducted by attending their attention to commonalities in usage among the prepositions. This task, however, was different from the nature of conventional grammar-translation method, where learners had memorized the meaning of prepositions equating with the Japanese translation. With such prior knowledge, it is plausible that the learners needed to reconstruct their knowledge in the target English prepositions, and the 30-minute treatment time was not enough for most of them to reconstruct their knowledge. This may be posited as a reason for the small gain in the tests for both groups.

The second and more important finding is that only the UG showed the significant gain in its mean value between pre- and post-tests. On the other hand, the significant gain was not detected in the LG scores between pre- and post-tests. This suggests that the SBI offered more benefits to the UG even with the fact that all the participants received the same learning process, i.e., they learned the same prepositions, received the same core schemas, the same example sentences, and the same brief explanations about the core schemas and they all worked in a group to figure out what their core meaning is. However, it was found out after being divided into two groups in accordance with the level of proficiency that the benefits of the SBI are different. This result may be suggestive in that the effect of the SBI can be influenced by learners' English proficiency level as Cho (2016) and Imai (2016) argue.

For this result, two potential reasons can be considered. First, the core meaning may be more effectively delivered to learners' mind if they have received a substantial amount of exposure in the target language. To put it another way, it seems impossible to connect the abstract core meaning with its contextualized senses unless learners have an experience of reading or listening to those concrete usages on their own. As CL researchers argue, schema highlights the role of learners' background knowledge and the meaning is characterized in terms of embodiment (Langacker, 1987, 2008). If the core meaning is given to novice learners who have not received a substantial amount of exposure, all they have to do is accept the core as it is, irrespective of the extent of learners' understanding on the schematic explanation. Learners need a language experience as to how the core is embodied in a specific context in order to understand the semantically or metaphorically motivated connection

between core and its contextualized senses. This situation is not essentially different from memorizing meaning through translation in a piecemeal fashion. Thus they only to accept the core as a norm and inflexible concept, which is essentially different from what cognitive linguists think as the schema. Learners with a substantial amount of exposure, on the other hand, are expected to notice the semantic connection between the core and its contextualized senses from their language resources and raise their awareness. Therefore, it is plausible to assume that the participants at a higher level of English proficiency in the present study had received more English exposure than those at a lower level, which may cause the different gains through the SBI.

The suggestions that were obtained from the present study lead to some pedagogical implications. The teachers need to provide some scaffolding for learners at a beginner level in order to enhance their understanding. For example, giving more illustrative examples or more detailed explanations may assist them, but the issue of how and to what extent the assistance is required to those learners must be pursued in the future research.

The limitations of this study have to be acknowledged. First, the present study dealt with only limited usages of the only six prepositions. It must be noted that this study showed one possibility of suggestion and the results must not be overgeneralized to the discussion of all prepositions. It goes without saying that more follow-up studies will be required to verify the effects from various respects. Second, the present study provided the 30-minute learning stage. The learners needed to work in a group to figure out the core meaning, share their image with the other learners in the classroom, and try to understand what meaning the core schemas represent. Thirty minutes may have been insufficient for all these tasks, and the learners' cognitive burden may have been too much. From this respect, it is necessary to examine whether the time allocated in this study was adequate to assess the effects of the SBI. In addition, the insufficient number of participants in the study should be mentioned. The number of the participants in this research was 41 and they were in one and the same class. The learners' proficiency, which is the crucial factor of this research, was not so clearly divided between the upper group and lower group. The future study should be done with more participants in a more decisive way. These issues have to be explored in the future research.

With some limitations in the present research, the most important finding that has been revealed is that the efficiency of the SBI is different depending on learners' English proficiency level.

## 5. Conclusion

The previous research has revealed that the CL approach employing core schemas, or the SBI, does not always reach conclusive evidence as to the primacy of its approach in comparison with the TBI. One of the potential reasons that might make an influence is learners' level of English proficiency. This study has attempted to reveal whether the effect of the SBI is different depending on learners' English proficiency level even if they receive the same instruction.

The findings drawn from the statistically analyzed results confirm the answer to the research question in this paper: Does learners' English proficiency level make an observable difference with respect to understanding the meaning of English prepositions when the CL-motivated SBI is conducted to Japanese learners of English at a technical college?

The answer to this research question is yes. Further, some scaffolding would be required for learners at a beginner level when the SBI is conducted. This is also an important pedagogical implication gained from the present study. However, it should be mentioned that the findings must be interpreted with caution for at least two reasons. First, as the present study dealt with only limited prepositions, the results must not be too overgeneralized to the other lexical items. Second, as the time allocated for learning may have been insufficient, more follow-up studies are required to assess the effect.

To conclude, this study, even with some limitations, was able to shed light on the effects of the SBI from a viewpoint of learners' level of language proficiency. In order to make the SBI more practical as well as effective, more follow-up studies are required for improvement and verification of this new teaching approach with lots of possibility.

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## Notes

Note 1. Tyler and Evans (2004) and Wijaya (2014) use the term “proto scene” and Cho (2016) uses the term “central image schemas” as almost the same meaning as the core schema.

Note 2. As for the detailed background and significance for employing group work and discussion in the SBI, see Fujii (2016b).

**Appendix A****Test Items Used for Pre-, Post- and Delayed Tests**

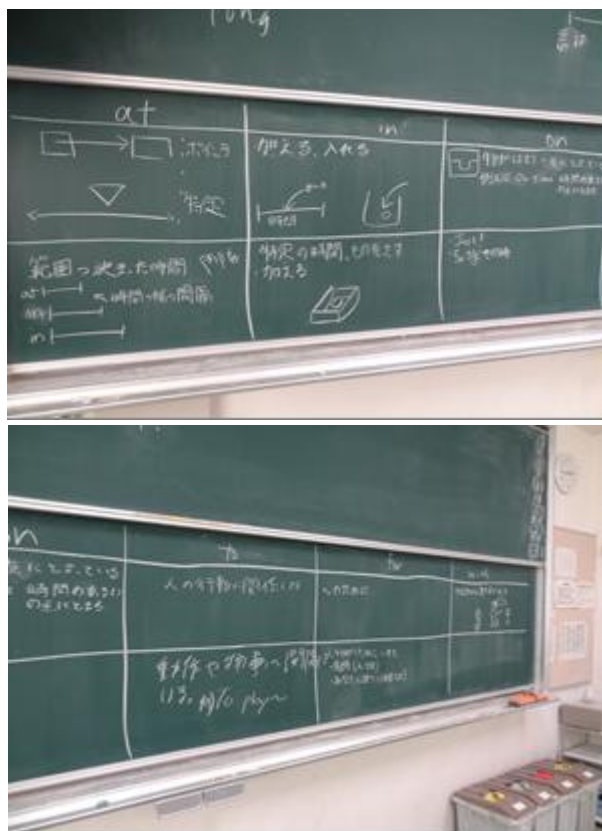
All the test items are accompanied with their Japanese translations.

at / for / in / on / to / with

1. Is this the file you were looking ( for )?
2. I will be in London for ( at ) least three days.
3. It was the first time I met him face ( to ) face.
4. Let's start our next meeting ( on ) time.
5. Are you waiting ( for ) someone?
6. We will send you free, along ( with ) your purchase, a pocket size World Atlas.
7. I have been working ( on ) a research project in Egypt for five years.
8. I look forward ( to ) your reply.
9. ( In ) addition, you'll get special days off for paternity leave.
10. This offer expires ( at ) the end of this month.
11. This book is filled ( with ) pictures and interesting facts about wild animals.
12. He'll be back ( in ) time for the party.
13. That striped shirts goes well ( with ) the gray pants.
14. ( At ) times I wish I could just quit my job and go to Tahiti.
15. Have you handed ( in ) the budget request for next year?
16. He took off his old tie and put ( on ) a new one.
17. I'll leave ( for ) the airport by 3:30 p.m.
18. I have to get back ( to ) work, so I'll call you again later.
19. Fill ( in ) the blanks with your name and e-mail address.
20. I prefer planning tasks ( to ) doing tasks.
21. The mountain is covered ( with ) snow.
22. The governor has resigned to care ( for ) his wife at home.
23. I think I can depend ( on ) Mr. Taylor.
24. I am afraid I can't say anything ( at ) this time.
25. She was standing ( at ) the top of the stairs.
26. The food and service was, ( in ) a word, excellent.
27. This is the key ( to ) the door.
28. Give yourself plenty of time to prepare ( for ) the meeting.
29. To begin ( with ), I'm going to explain our sales policy.
30. The game player will go ( on ) sale in Japan on August 20.

## Appendix B

### Samples of the Core Schemas by the Participants



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