An Investigation of the Developmental Pattern of Japanese EFL Students' Grammatical Competence¹

Taeko Kamimura

1. Introduction

The decline of grammatical competence has recently been problematized in recent EFL contexts in Japan (Hidai et al, 2012). There are several reasons for this decline.

Since the traditional Grammar Translation Method was replaced by Communicative Language Teaching (CLT), much attention has been paid to EFL students' development of aural and oral aspects of communication skills. CLT was influenced by the notion of communicative competence proposed by Canale and Swain (1980). Although Canale and Swain did include grammatical competence as one of the important components of communicative competence, Japanese EFL instruction based on CLT, however, was likely to place too much emphasis on fluency in spoken English in communication, devaluing thus grammatical accuracy. Students taught English in this way often failed to develop grammatical competence at a sufficient enough level to read and write in English effectively, particularly, in academic literacy settings, where accuracy is highly valued.

The decline of the students' grammatical competence is especially a serious issue in the Japanese education system. Japanese schools began to recruit high school students by adopting various untraditional admission systems which had not been widely used in Japan, such as, those based on recommendations by the schools where the students belong and by the students themselves. Students who take regular entrance examinations are supposed to review all the grammatical items taught at the junior high and high school levels in order to pass the examinations. On the other hand, many of the students who enter high school and universities through the nontraditional admission systems do not spend enough time reviewing and consolidating what they had learned in English classes at junior high and high school (Koda, 2011). Consequently, those students tend to lack basic grammatical competence, which is necessary to study in academic English classes at the higher education level. Kamimura and Hashimoto (2015) reported that Japanese university low-proficient EFL students they examined found the majority of the grammatical items taught at high school, such as relative adverbs and subjunctives, to be extremely difficult to learn and also actually failed to answer the questions involving these items in the grammar test they prepared. Nowadays it is not unusual to find Japanese universities where remedial English classes are prepared for these students to develop their basic grammatical competence (Nakai, 2008a; Koda, 2011).

In order to conduct effective teaching to foster Japanese students' grammatical competence, it is first necessary to clarify which grammatical items they have much difficulty with and which items they do not. Without such baseline data, any effective EFL instructional method could not be designed.

2. Review of literature

Several past studies have attempted to examine Japanese EFL students' grammatical competence. A pioneering study conducted by Takenaka, Fujii, Okihara, Matsuhata, and Takatsuka in 1988 examined Japanese junior high school students' grammatical competence by using a grammar test. They found that those students had difficulty with questions where relative pronouns are used. However, they also found that correct answer rates of questions in the same "relative pronoun" category varied depending on question types and the

positions of the relative clauses; thus, they maintained that it is difficult to conclude that the students always have difficulty in employing relative pronouns.

More recent studies have been carried out by different researchers. They investigated university students' grammatical competence by focusing on specific grammatical items. Nakai (2008b), for example, attempted to examine which grammatical items caused difficulties for university students in remedial classes, and found that the students found two structures to be especially difficult: the SVOO sentence structure where direct and indirect objects are used, and interrogative sentences where wh-interrogatives are used as sentence subjects. In another study, Nakai (2011) found that those students in remedial classes tended to make errors in constructing sentences involving complements, present participles, and past participles. Chujo, Yokota, Hasegawa, and Nishigaki (2012) conducted a study where they prepared a grammar test with questions that had a wider range of grammatical items as targets. It was found that their university students especially failed to give correct answers for questions which contained such items as the subjunctive mood, concessions, the "subject + seem + to infinitive" structure, inanimate subjects, and emphatic constructions.

Compared with these studies that dealt with students at the university level, studies that examined students at the secondary school level are scarce. Focusing on clauses, Kimura and Kanatani (2006) found that for Japanese EFL junior high school students, noun phrases were difficult grammatical construction, and in particular, the ones followed by post-modifiers. Kimura, Kanatani, and Kobayashi (2010) reported similar findings, arguing that the understanding of noun phrase structures could discriminate successful from unsuccessful Japanese learners of EFL, and that a long period of time is necessary for learners to acquire these structures. Kawamura and Shirahata (2013) investigated Japanese high school students' performance on a grammar test that included various grammatical items taught at the junior high school level. It was found that the students scored best on pronoun questions and worst on participles, while to-infinitives, comparatives, present perfect, passive voice, and relative pronouns ranked in between.

The review of the past studies clarified that the majority of these studies involved university students as participants and that they investigated the students' acquisition levels by focusing on several specific grammatical items. Thus, we need to conduct a more comprehensible study which (1) deals with a wider range of grammatical items as targets of investigation, and (2) involves not only university students but also student at the secondary level. By doing so, we could get a clearer picture of the developmental pattern of Japanese EFL students' acquisition of various grammatical items, and thus we could provide the students with appropriate EFL instruction to develop their grammatical competence.

3. Purpose of the present study

The purpose of the present study was to investigate the developmental pattern of grammatical competence of Japanese EFL high school and university students. Specifically, the following four research questions were posed:

- 1) Which grammatical items do Japanese first-year high school EFL students successfully acquire, and which items do they fail to acquire?
- 2) Which grammatical items do Japanese first-year university EFL students successfully acquire, and which items do they fail to acquire?
- 3) In which grammatical items do the two groups of students differ in terms of accuracy rates?
- 4) Are there any patterns of errors that characterize each group?

4. Procedure

4.1 Participants

Two groups of students participated in the study. One group consisted of

30 Japanese first- year high students at a private high school. The other group was comprised of 40 Japanese first-year students at a four-year university. The high school was affiliated with the university, and a considerable number of the high school students went on to study at that university every year. The two groups were, therefore, considered to be cohesive and comparable enough to explore a developmental pattern of Japanese EFL students' grammatical competence.

4.2 Grammar test

A grammar test was prepared by referring to a high school writing textbook *World Trek English Writing* (2nd ed.) (2008). The textbook contained 60 model sentences, each of which had a different grammatical item as a target. Out of these 60, 40 sentences were chosen for the grammar test in the present study. The grammatical items used in these 40 sentences were listed in *Course of Study for Junior High Schools, Foreign Languages, English* (2008), a guideline for English Education in Japan, which was compiled by the Japanese Ministry of Education, Culture, Sports, Science and Technology. The remaining 20 items were those that were expected to be covered at the high school level; consequently, they were eliminated in the present study. The 40 model sentences fell into eight grammatical categories: (1) sentence structure, (2) tense/aspect, (3) modal auxiliary verbs, (4) comparative/superlative adjectives, (5) non-finite verbs (infinitives/gerunds/participles), (6) passive voice, (7) clauses, and (8) inanimate subjects.

Each question on the test was given in the following manner:

- A Japanese sentence which corresponded to the meaning of the model sentence taken from *World Trek English Writing* was given as a question;
- 2) Words in each model sentence were scrambled; and

3) The students were told to arrange the scrambled words into a correct order to make an English sentence which expresses the meaning of the Japanese sentence.

An example of the questions is shown below:

Question 1 これは私たちの町で一番大きなレストランです。 (is / in / this / biggest / our town / the / restaurant) Target grammatical item: superlative adjective Answer: This is the biggest restaurant in our town.

Appendix A lists the questions on the test used in the present study. The high school students took the test for 45 minutes, while the university students took it for 35 minutes. The difference in time allotment was due to the length of their EFL studying at school. Both the high school and university students took the grammar test in April, the beginning of the Japanese academic calendar.

5. Analysis

The students' answers to the questions on the grammar test were analyzed both quantitatively and qualitatively.

5.1 Quantitative analysis

5.1.1 Correct answer rates (accuracy rates)

The correct answer rates of the two groups of students were calculated for (1) the total questions, (2) each of the eight different grammatical categories, and (3) each question. As the test required the students to unscramble the words given in the questions and alternative answers were not expected, the exact expected answer was regarded as correct and no partial point was given for any incomplete

answers.

5.1.2 Acquisition patterns

Based on the analysis of the students' correct answer rates, an attempt was made to search for their acquisition pattern. Here, following Brown (1973) and Krashen (1977), 80 % of accuracy was set as the threshold level to determine whether or not a given grammatical item had been acquired by the learners. The grammatical items were then classified into four groups: (1) the items which both the high school and university students had acquired (at the accuracy rate equal to or above 80%); (2) those which the high school students had failed to acquire (with the accuracy rate below 80%), but the university students had acquired (with the accuracy rate equal to or above 80%), (3) those which neither the high school nor the university students had yet acquired (at the accuracy rate below 80%); and (4) those which the high school students had acquired (with the accuracy rate equal to or above 80%), but the university students had not acquired (with their accuracy rate below 80%). This classification scheme is illustrated in Table 1.

Table 1

Classification of Grammatical Items

Participants Groups	High school students	University students
Group 1	Acquired: accuracy rate $\geq 80\%$	Acquired: accuracy rate \geq 80%
Group 2	Not acquired: accuracy rate < 80%	Acquired: accuracy rate \geq 80%
Group 3	Not acquired: accuracy rate < 80%	Not acquired: accuracy rate < 80%
Group 4	Acquired: accuracy rate \geq 80%	Not acquired: accuracy rate < 80%

5.2 Qualitative analysis (Error analysis)

Focusing on the grammatical items in Group 3, the errors made by the high school and university students were closely examined. The errors were analyzed to explore possible causes of difficulties for the respective groups of students and to trace their developmental acquisition processes.

6. Results and discussion

6.1 Results of quantitative analysis

6.1.1 Total questions

Table 2 displays the high school and university students' correct answer rates for the questions on the grammar test.

As shown in Table 2, the average accuracy rate for the high school students was 75.97%, while the rate for the university students was 89.56%. The university students reached the threshold level of 80%, but the high school students did not. Also the standard deviation for the high school students (23.58) was larger than that for the university students (11.95). This means that the university students succeeded in acquiring the majority of the grammatical items taught at the junior high school, but that the high school students could not successfully acquire some of the grammatical items. As Kimura and Kanatani (2010) argue, acquisition of grammar needs a long period of time, and sometimes a few years after a new grammatical item is first introduced.

Table 2

Accuracy Rates for 40 Questions for High School and University Students

Question		rates (%)
·	High school students	University students
	1 96.67	100.00
	2 93.33	95.00
	3 100.00	95.00
	4 96.67	100.00
	60.00	80.00
	66.67	92.50
	7 26.67	60.00
:	8 90.00	97.50
	9 80.00	80.00
10	93.33	87.50
1	66.67	92.50
1:	2 100.00	92.50
1.	3 100.00	97.50
1.	4 86.67	95.00
1	5 86.67	97.50
1	5 96.67	97.50
1'	7 86.67	92.50
1	8 86.67	77.50
1	9 100.00	100.00
2	50.00	72.50
2	1 100.00	97.5
2	2 50.00	82.50
2	3 60.00	87.50
24	4 63.33	97.50
2	5 23.33	65.00
2		70.00
2		100.00
2	8 93.33	95.00
2		95.00
3	66.67	97.50
3		95.00
3:		50.00
3		97.50
3.		92.50
3		95.00
3		97.50
3		80.00
3		92.50
3		100.00
		92.50
/lean	75.97	89.50
SD	23.58	11.9

Notes: Gray parts indicate the level below 80% (threshold level of acquisition). This also applies to Tables 4 and 5.

6.1.2 Accuracy rates for different grammatical items

Table 3 illustrates the average accuracy rates for the eight grammatical categories.

Table 3

Average Accuracy Rates for the Eight Different Grammatical Categories

	Average acc	uracy rates
Grammatical categories	High school students	University students
	(%)	(%)
Sentence structure	87.88	92.95
Tense/aspect	88.75	92.81
Modal auxiliary verbs	67.78	87.50
Comparative/superlative adjectives	60.00	83.33
Non-finite verbs	68.75	87.50
Passive voice	81.67	96.25
Clauses	57.30	88.30
Inanimate sujbects	10.00	73.75

The high school students seemed to have acquired the basic sentence structures (87.88%), tense/aspect variations (88.75%), and passive constructions (81.67%). However, they did not adequately acquire the remaining five categories: modal auxiliary verbs (67.78%), comparative/superlative adjectives (60.00%), non-finite verbs (68.75%), clauses (57.30%), and inanimate subjects (10.00%). The inanimate subjects seemed to be the category which was particularly difficult for this group of students. On the other hand, the university students attained 80% accuracy in almost all the grammatical categories: sentence structures (92.95%), tense/aspect (92.81%), modal auxiliary verbs (87.50%), comparative/

superlative adjectives (83.33%), non-finite verbs (87.50%), passive voice (96.25%), and clauses (88.30%). Inanimate subjects, however, were found to be the category that was difficult even for the university students (73.75%), although their correct answer rate was much higher than their high school counterparts'.

6.1.3 Accuracy rates for individual questions: acquisition pattern

When the 40 grammatical items were analyzed based on the classification scheme shown in Table 1, it was found that no item fell into Group 4; therefore, this section will discuss Group 1, 2, and 3. Group 1 corresponds to the grammatical items for which both the high school and university students reached the 80% accuracy, and therefore, which can be called "early-acquired" items. Group 2 consists of the items for which the university students reached 80% accuracy, but the high school students did not, and therefore, they can be called "mid-acquired" items. Finally, Group 3 comprises the items which neither the high school nor the university students attained 80% accuracy, and thus they can be called "late-acquired" items. In sum, the 40 grammatical items were categorized into early-, mid-, and late-acquired items. The result of analysis revealed 23 early-acquired, 11 mid-acquired, and 6 late-acquired items.

In the present study, for the pedagogical purpose for EFL teachers, the mid- and late-acquired items need special attention. The following section will, therefore, examine these two groups.

6.1.4 Mid-acquired grammatical items

Table 4 lists the 11 mid-acquired items.

The high school students, in particular, seemed to have difficulty with the use of to-infinitives (Q5, 24, and 31), modal auxiliary verbs (Q22 and 30), past participles (Q2 and 11). The students' difficulty with these items can be explained by the complex relationships between form and function. For instance, to-

infinitives are simple in terms of form: to plus verbs. However, they have multiple functions: Questions 5, 24, and 31 all involve the use of to-infinitives, but their functions all vary, as is shown in Table 4.

Table 4

	Accuracy rat	es	Grammatical items
Questions	High school student (%)	University students (%)	Grammatical items
5	60.00	80.00	SVO+to-infinitive
6	66.67	92.50	SVO(C=participle)
11	66.67	92.50	Passive voice
22	50.00	92.50	Modal auxiliary verb(may)
23	60.00	87.50	To-infinitive (as adjective)
24	63.33	97.50	Verb+To-infinitive/Gerund (as object)
30	66.67	97.50	Modal Auxiliary verb (must)
31	53.33	95.00	To-infinitive (as adverb)
33	73.33	97.50	Comparative adjective
34	62.07	92.50	Noun clause
37	56.67	80.00	Present perfect (experience)

The Mid-acquired Grammatical Items

As for modal auxiliary verbs, English has a variety of modal auxiliary verbs; moreover, each auxiliary verb has different functions. For example, "may," which is used in Q22, expresses permission ("May I bring my dog into the restaurant?"), but "may" can also express weak probability in another context ("It may rain tomorrow"). Likewise, "must" in Q30 expresses certainty ("You must be tired today after watching TV for so long"), while it has another meaning of obligation ("You must go to bed early"). Past participles appear various structures, such as passive voice, present perfect tense, and the SVC structure (as in "You felt excited" in Q5). It seems that the high school students had trouble with appropriate mapping of form and function in answering the questions that involved those grammatical constructions with multiple functions.

6.1.5 Late-acquired grammatical items

Six items were identified as late-acquired, as can be seen in Table 5.

Table 5

	Accuracy rat	es	Grammatical items
Questions	ligh school students (%	University students (%)	Grammatical items
7	26.67	60.00	Compartive adjective
18	13.33	77.50	Inanimatve subject
20	50.00	72.50	SVOC(C=adjective)
25	23.33	65.00	Relative pronoun (as object)
26	6.67	70.00	Inanimate subject (+ show, tell)
32	43.33	50.00	Participle (as adjective)

Late-acquired Grammatical Items

There are two findings that need particular attention. First, inanimate subjects were problematic grammatical items for the university students (77.50% for Q18, and 70.00% for Q26); the high school students, however, found them even more problematic (13.33% for Q18 and 6.67% for Q26) than their university counterparts. Second, the target grammatical items for Q25 and Q32 were a relative pronoun modifying a noun phrase and a present participle modifying a noun phrase, respectively. Both of these items are post-modifiers. This post-modification created a problem for both the two groups. This result is in line with the findings in a study by Kimura and Kanatani (2010), who found that post-modification is a difficult construction for junior high school students. Those two findings will be discussed more in detail in the next section.

6.2 Results of qualitative analysis: Error analysis

This section will analyze the students' errors found in the answers to the questions whose targets were inanimate subjects or post modification, as pointed out in the previous section. By doing so, an attempt was made to examine possible causes of difficulties that these structures might entail.

6.2.1 Inanimate subjects

The following is Question 26.

Answer: A recent survey shows that only children are more common in modern families.

For this question the high school students attained only 6.67% accuracy rate. None of the high students' incorrect answers placed "a recent survey" as the subject of the sentence. One student wrote, "A only children are more common in modern families that shows survey recent." As this example shows, for this group of students, producing a sentence with an animate subject might have been a natural thing to do because their native language, Japanese, rarely use inanimate subjects. Compared with the high school students, the university students attained 70.00% of accuracy, though this rate did not reach the threshold level of acquisition yet. Forty-two percent of the university students' wrong answer started with "recent survey" as the subject, e.g., "Recent survey shows that a only children are more common in modern families."

Question 30 also involves an inanimate subject.

Q30: E-mail のおかげで多くの人々と連絡を取ることができます。Answer: E-mail enables us to communicate with many people.

The high school students' correct answer rate for this question was 13.33%. Sixty-seven percent of their incorrect answers started with "email" as the sentence subject. However, the structure involved a to-infinitive, and this might have negatively affected their answers. As we have seen in 5.1.4, the to-infinitive was also a difficult grammatical item for the high school students. The combination of the two problematic items, i.e., the inanimate subject and the to-infinitive, might have made the question even more difficult for these students, as observed in the following incorrect answer that said "E-mail enables communicate to many people with us." The university students, however,

manifested 77.50% of accuracy, which almost reached the threshold level. Most of their incorrect answers were also found to be closer to the correct answer: a typical example was "E-mail enables to communicate us with man people."

6.2.2 Post-modification

Question 25 concerns the relative clause.

Q25: 彼女が行きたかった寺は(残念ながら)閉まっていました。
 Answer: (Unfortunately,) the temple which she wanted to visit was closed.

For this question, the high school students attained 23.33% of accuracy. Sixty-one percent of their incorrect answers placed a relative clause at the end of the sentence, as in "She wanted to visit the temple which was closed" or "The temple was closed which she wanted to visit." Similarly, 93% of the university students' incorrect answers placed a relative clause at the end of the sentence and produced the same incorrect sentences as the high school students did. Thus, the students knew how to make a relative clause, but they failed to position it at a proper place. Several factors seem to be related to the students' difficulty with the use of relative clauses. For one thing, their first language, Japanese, uses premodification, instead of post-modification: kanojo no ikitakatta (彼女の行き たかった) comes before tera (寺). Also, it is cognitively more difficult to use a relative clause in the middle of the sentence by modifying the subject of the sentence than to use it at the end of the sentence by modifying the object or the complement in the sentence (Yule, 1998). For example, the sentence "I know the girl who was at the station yesterday" is easier for the students than the sentence "The girl who was at the station yesterday is my classmate."

Question 32 also makes use of post-modification.

Q32: 校庭を走っているあの少年は次郎です。 Answer: The boy running in the schoolyard is Jiro.

The high school students tended to misinterpret "that" as a relative pronoun. Forty-seven percent of the students produced such sentences as "The boy that running in the schoolyard is Jiro."

Mori (1983) maintained that Japanese students tend to use relative clauses rather than participles when they try to post-modify noun phrases. The similar tendency was found in the university students' answers: 60% of their wrong answers used "that" as a relative pronoun. It is notable, however, that some of the university students tried to use the present participle as a modifier, and they used it as a pre-modifier, rather than a post-modifier, which resulted in another wrong answer: "That running boy is Jiro in the schoolyard." This error suggests that post-modification is a difficult structure even for university students. At the same time, because such an error was not observed in the high school students' incorrect answers, it also shows hypothesis testing by trial and error on the part of the university students. As the error analysis reveals, the high school and university students made different types of errors for the same questions. The latter group's errors were closer and more similar to the expected correct answers, and it can be said that this indicates some characteristics of Japanese EFL students' interlanguage and their developmental process of grammatical competence.

7. Conclusion

The present study attempted to explore a developmental pattern of grammatical competence of Japanese EFL high school and university students. The results of analysis clarified the following:

1) The Japanese university students' acquisition level was higher than that of the high school students;

- The Japanese university students succeeded in acquiring the items of various grammatical categories, except for inanimate subjects, but the high school students could not reach the threshold level of acquisition in the five categories;
- Part of a Japanese students' developmental pattern of grammatical competence was clarified by identifying the early-, mid-, and lateacquired grammatical items; and
- Errors made by the high school and university students had some characteristics, which manifested their developmental process of grammar acquisition.

The present results offer several pedagogical implications. First, in this study, grammatical items taught in junior high school EFL classrooms were used for the grammar test. The high school students' average accuracy rate did not reach 80%. This suggests that more time is necessary for acquisition to take place. EFL teachers are often preoccupied with teaching all the grammatical items covered in the textbooks because of the limited time of English classes. Moreover, there are several grammatical items which are dealt with only once in the textbook (Suzuki, 2016). In such a teaching situation, it is necessary to design a lesson where teachers can review the grammatical items they have already taught in a spiral manner by gradually increasing the level of complexity. For example, when teachers teach a relative clause, they could first introduce a relative clause placed at the end of the sentence, and then they could teach the one placed in the middle of the sentence. This way, teachers can help their students acquire the relative clause even though they have limited teaching time.

Second, the present study could identify the pre-, mid-, and late-acquired items. Based on this result, we could argue that teachers need to pay more attention to the mid- and especially late-acquired items. In many cases, university English textbooks for remedial classes are compiled with basic sentence structures in the first few chapters. The majority of these items are early-acquired ones, and therefore, teachers do not need to spend too much time on the review of these items. Rather, they need to spend more time on the late-acquired items, such as inanimate subjects and post-modifiers.

The present study has several limitations. The first limitation is that the study did not cover the grammatical items listed in the course of Study for Senior High school, Foreign Languages, English (2010). Several past studies pointed out that Japanese university EFL students failed to acquire almost half of the grammatical items taught at high school (Chujo, Yokota, Hasegawa, & Nishigaki, 2012). Further studies are needed to clarify the acquisition levels of various grammatical items by including those covered in high school English classrooms.

Also, some of the questions unintentionally included two grammatical items. For instance, in Question 7, whose correct answer was "Nothing was more important than a computer," the target was a comparative adjective, but it also contained an inanimate subject. For this type of questions, it is difficult to determine which grammatical item caused difficulty for the students. Due caution is required when a grammar test is designed to obtain valid data.

Finally, the grammar test used in the present study adopted a style of unscrambling the given English words or filling in the blanks to make English sentences that corresponded to the Japanese sentences. If the students had been given a more-production oriented type of questions, where no English words are given as clues, their performance would have been changed, possibly for the worse.

Grammar teaching is vital in EFL education for both teachers and students. From the perspective of teachers, Nakabori and Chujo (2004) claim that development of EFL students' grammatical ability is indispensable for their communicative competence, and for their receptive as well as productive use of English. At the same time, Kanagawa, Misaki, and Kawashima (2005) report that students themselves acknowledge that grammar and vocabulary are key factors if they wish to improve their English abilities. Considering grammar instruction is of utmost importance for both teachers and learners, further studies are definitely needed to clarify the developmental process of grammar acquisition more in detail.

Notes

¹ This study was supported in part by a Senshu University research grant 2014, *Gakushuusha no shuujukudo to kyoushi no Nanido hanntei ni motozuku eigo bunpou shidou* [Grammar teaching based on students' acquisition levels and teachers' assessment of difficulties] and also by JSPS KAKENHI Grant Number 15K02698.

Acknowledgments

This study was initially conducted with Dr. Takeshi Takizawa, who suddenly passed away on May 14, 2014. I deeply appreciate his contribution to this study. Without his contribution, I could never have finished this investigation. Dr. Takizawa taught English at Senshu University High School and teacher education courses at Senshu University. He was an extremely capable, sincere teacher and researcher. He was loved and will be loved and respected by his students and colleagues.

I am very grateful to George Smith and reviewers of the journal for giving me valuable comments and suggestions on the original manuscript of this paper.

References

- Brown, R. (1973). *First language: Early stages.* Cambridge, MS: Harvard University Press.
- Canale, M., & Swain, M. (1980) Theoretical bases of communicative approacehs to second language teaching and testing. *Applied Linguistics*, 1, 1-47.
- Chujo, K., Yokota, K., Hasegawa, S., & Nishigaki, C. (2012). Remedial gakushuusha no eigo shuujukudo to eigo bunnpoujyukutatsudo chousa [Identifying the general English proficiency and distinct grammar proficiency of remedial learners]. Nihon Daigaku Seisan Kougakubu Kenkyuu Houkoku B, 45, 43-54.
- Hidai, S., Matsumoto, H., Takahashi, S., Suzuki, A., Oda, M., Enomoto, M., and Tanji, M. (2012). Daigaku nyuugaku mae no bunpou no teichakudo ni kansuru kenkyuu [A study of pre-college English grammar acquisition]. *Tamagawa Daigaku Bunngakubu Kiyou*, 53, 31-58.
- Kamimura, T., & Hashimoto, Y. (2015, November). Difficulty levels of different grammatical items for university EFL students. A paper presented at 25th International Symposium and Book Fair on English Teaching, Taipei, the Republic of China.
- Kanagawa, Y, Misaki, L., & Kawashima, K. (2005). Gakusei no needs ni kotaeru eigo jyugyou no kouchiku o mezashite—Eigo jyugyou ankeito kara miru eigo jyugyou eno youbou— [Aiming for the development of an English curriculum which fully meets students' needs: Students' English class expectation, the results of a survey on English classes]. *Heian Jogakuin* Daigaku Kenkyuu Nenpou, 6, 97-107.
- Kawamura, R., & Shirahata, T. (2013, August). Chuugaku sotsugyousei no eigo bunpou ni okeru konnnann koumoku no chousa. [Difficulty levels of English grammatical items for junior high school graduates]. A paper presented at

37th Annual Convention of Kantokoshinetsu Association of Teachers of English, Matsumoto.

- Kimura, M., & Kanatani, K. (2006). Eigo no ku-kouzou ni taisuru nipponjin chuugakusei no rikaido chousa: "dounyuu" kara "teichaku" made no jisa o tokuteisuru kokoromi [A survey on Japanese junior high school students' knowledge of English phrase structures: Identifying time-gaps between instruction and acquisition]. *KATE Bulletin, 20,* 101-112.
- Kimura, M., Kanatani, K., Kobayashi, M. (2010). Nipponjin chuugakusei no eigo meishiku kouzou no rikaikatei: Juudannteki chousa ni yoru jittaihaaku to hanbetsuryoku no kenshou [The development of Japanese junior high school students' understandings of English noun phrases: Describing the sequence patterns and testing their discriminative powers]. *KATE Bulletin, 24,* 61-72.
- Koda, N. (2011). Remedial kyouiku ni okeru bunpou koumoku no gotouchousa to toutatsudo mokuhyou [An error analysis of some grammatical items used in remedial English teaching and its achievement goal. *Shukutoku Tanki Daigaku Kiyou*, 50, 225-240.
- Krashen, S. (1977). Some issues relating to the Monitor Model. In H. D. Brown,C. Yorio, & R. Crymes (Eds.), *On TESOL '77* (pp. 144-158). Washington,DC: Teachers of English to Speakers of Other Languages.
- Ministry of Education, Culture, Sports, Science and Technology. (2008). *Chuugakkou Gakushuu Shidou Youryou Kaisetsu Gaikokugo-hen*. [The Course of Study for Junior High Schools, Foreign Languages, English]. Tokyo: Kairyudo.
- Ministry of Education, Culture, Sports, Science and Technology. (2010). Koutougakkou Gakushuu Shidou Youryou Kaisetsu Gaikokugo-hen. [The Course of Study for Senior High Schools, Foreign Languages, English]. Tokyo: Kairyudo.

- Nakabori, A., & Chujo, K. (2004). Bunpou shidou ni yoru daigaku level gakushuusha no eigo communication nouryoku ikusei no kouka [Teaching English grammar: Its effects on improving beginning-level college students' communicative proficiency]. Nihon Daigaku Seisan Kougakubu kenkyuu Houkoku B, 37, 75-83
- Nakai, N. (2008a). Remedial gata jyugyou ni taisuru gakushuusha no ishikichousa [A study of learners' attitudes toward remedial education in a Japanese university English course]. Nihon Daigaku Seisan Kougakubu Kenkyuu Houkoku B, 41, 35-41.
- Nakai, N. (2008b). Daigaku eigo class ni okeru remedial kyouiku no kenkyuu [A study of remedial education in a Japanese university's freshman English course utilizing English grammar diagnositic tests]. Meikai Gaikokugogakubu Ronshuu, 20, 177-186.
- Nakai, N. (2011). Daigaku no ippankyouyou eigo class ni oite bunpou chishiki o ishikika saserukoto no jyuuyousei [On the importance making students conscious of their knowledge of grammar in general-education English courses at Japanese universities]. *Ibunka no Shosou, 31*, 133-151.
- Oi, K., Kamimura, T., Kumamoto, T., Nix, M., Hagiwara, I., & Matsumoto, K. (2008). World Trek English Writing, 2nd ed. Tokyo: Kirihara Shoten.
- Suzuki, H. (2014, August). Eigo de rikaisuru reading katsudou wa kanou ka [Possibility of reading English materials thought translation]. A paper presented at 38th Annual Convention of Kantokoshinetsu Association of Teachers of English, Urayasu.
- Takenaka, T., Fujii, A., Okihara, K., Matsuhata, K., & Takatsuka, N. (1988).
 Chuugaku Koukousei no eigo bunpouryoku no shinndann to hyouka.
 [Diagnosis and assessment of junior high school and senior high school students' grammatical abilities]. Shikoku Eigo Kyouiku Gakkai Kiyou, 8, 87-108.

Appendix A

Questions on the Grammar Test

Rvftujpo	Dhfufford df	Kodboftf	Ushfuttsbn n bijdriblú n	Hsbn n bujdbufDbuf hpsz
	l Our schoel is en a hill.	私たちの学校は丘の上にあります。	S+be+location	Sentence structure
	2 Mr. Watanabe often tells us jokes.	護辺先生はよく私たちに冗談を言います。	SVO(person)O(thing)	Sentence structure
	3 My father bought me a digital camera.	父がデジタルカメラを買ってくれました。	Past	Tensefaspect
7	4 His works were read by many people.	後の作品は多くの人に読まれています。	Passive voice	Passive voice
	5 My parents told me to come home before dinner.	両親は夕食の時間までに帰ってくるように私に言いました。	SVO+to-infinitive	Non-finite verbs
	6 Yuka felt excited when she saw the blue sky of Okinawa.	由住は沖縄の青い空を見て興奮しました。	SVC(C=participle)	Sentence structure
	7 Nothing is more useful than a computer.	コンピューターほど役に立つものはありません。	Compartive adjective (more ~)	Comparative/superlative adjective
~	8 There is a cafeteria on the first floor.	1 階に食堂があります。	There is(are) ~	Sentence structure
, j	9 We chose a card for him.	私たちは彼のために誕生日カードを選びました。	SVO(thing)+for/to+person	Sentence structure
))	101 was taking a bath at ten o'clock last night.	昨夜の10時にはお風呂に入っていました。	Present continuous	Tense/aspect
	11 was disappointed to miss the Sherlock Homes TV scries.	シャーロック・ホームズのテレビシリーズを見逃してがっかりしました。	Passive voice (as adjective)	Passive voice
Ţ	12 It get up six o'clock every morning.	私は毎朝6時に起きます。	SV (rdinary verb)	Sentence structure
1	13 We call him Tom.	私たちは彼をトムと呼んでいます。	SVOC (C=noun)	Sentence structure
7]	14 My brother is going to go to Thailand next year.	兄は来年タイに行きます。	Future simple (will vs. be going to)	Tensefaspect
;I	15 I must feed the dog every morning.	私は毎朝、犬にえさをやらなければいけません。	Modal auxiliary verb (must as obligation)	Modal auxiliary verbs
If	16 Takeshi is good at painting.	武は絵を描くのが得意です。	Gerund (non-finite verb)	Non-finite verbs
1	$17 { m Mary}$ has several friends who are studying Japanese.	メアリーには日本語を勉強している数名の友人がいます。	Relative pronoun (s subject)	Clauses
¥	18 E-mail enables us to communicate with many people.	Eメールのおかげで、多くの人々と連絡を取ることができます。	Inanimatve subject	Inanimate subjects
51	19 My favorite singer is Lady Gaga.	私のお気に入りの歌手はレディー・ガガです。	SVC	Sentence structure
X	20]His leadership will make the team strong.	彼のリーダーシップがチームを強くしてくれるでしょう。	SVOC (C=adjective)	Sentence structure

2	 My grandmother is coming tomorrow. 	明日祖母が来ます。	Present continuous (near future)	Tenselaspect
2	22 May I bring my dog into the restaurant?	このレストランは犬を連れて入ってもよろしいですか。	Modal auxiliary verb (may as permission)	Modal auxiliary verbs
1	23 We need some teachers to help us.	僕たちを助けてくれる先生が必要です。	To-infinitive (as adjective)	Non-finite verbs
2	24 I need to think about my future.	私は将来について考えなくてはなりません。	Verb+to-infinitive/gerund (as object)	Non-finite verbs
2	25 Unfortunately, the temple which she wanted to visit was closed.	残念ながら、彼女が行きたかった寺は閉まっていました。	Relative pronoun (as object)	Clauses
2	26 A recent survey shows that only chidlren are more common in modern families.	最近の調査によれば、現代の家族では一人っ子が増えています。	Inanimate subject (+ show, tell)	Inanimate subjects
2	27 [] like chemistry.	최は化学が好きです。	SVO	Sentence structure
2	28 I watch TV for two hours every night.	私は毎晩2時間テレビを見ます。	Present simple vs. present continuous	Tenselaspect
6 4	29 I have seen the movie <i>Trianic</i> three times.	私は映画『タイタニック』を3回見たことがあります。	Present perfect (experience)	Tenselaspect
6	30) You must be tired today after watching TV for so long.	テレビの見過ぎで今日は疲れているんじゃない。	Modal auxiliary verb (must as certainty)	Modal auxiliary verbs
3	31 Our elass gathered after school to clean the streets.	通りの掃除をするために放課後クラスで集まりました。	To-infinitive (as adverb)	Non-finite verbs
3	$32{ m That}$ boy running in the schoolyard is Jiro.	検鹿を走っているあの少年は次郎です。	Present participle (adjective)	Non-finite verbs
3.	33 Most restaurants are smaller than family restaurants.	ほとんどのレストランはファミリーレストランよりも小さいです。	Comparative adjective (-er)	Comparative/superlative adjective
ŝ	34 I know that smoking is harmful for the health.	私は喫煙が体に悪いことを知っています。	Noun clause	Clauses
35	35 Our team lost the game last week.	私たちのチームは先週試合に負けてしまいました。	SVO+adverb	Sentence structure
3	36 I am playing comuter games at the moment.	私はちょうど今コンピューターゲームをしているところです。	Action vs. state verb	Sentence structure
3	37 Yoko and I have known each other since we were elementary school students.	洋子と私は小学生の時からの知り合いです。	Present perfect (duration)	Tenselaspect
33	38 [f didn't know what to do and just stood here.	何をしてよいのか分からず、ただここに立っているだけでした。	To-infinitive (what to∼)	Non-finite verbs
3	391 was not interested in her paintings.	僕は彼女の絵にはあまり興味を持てませんでした。	SVC(C=participle)	Sentence structure
4	40 This is the biggest restaurant in our town.	これは私たちの町で一番大きなレストランです。	Superlative adjective (-est)	Comparative/superlative adjective