Diversity of False Beginners in Japanese Universities: Technology Majors and Management Majors

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Abstract

The goal of Prime Minister Abe administration's university reform, under its growth strategy, is to enhance diversity within Japanese universities. The aim is to create innovative research and to nurture global human resources. However, the administration lost sight of a different aspect of diversity in Japanese universities: decreasing academic quality of the students. This negative aspect is said to have stemmed from the decreasing of Japan's young adult population and increases in private universities and Japan's current economic slump. English education in Japanese universities faces the following contextual duality. On the one hand, students learning both English and content simultaneously can proceed into global job market; on the other hand, false beginners are in need of remedial education. The authors would like to discuss students' differences in their cognitive development. Some false beginners cannot endure English grammar learning because their cognitive load seems to overtax their limited working memory. In our research, three quizzes with different load levels were given to two different groups of college students at two universities. The results of these students were closely examined. By comparing the results of the two different majors, the authors would like to explain the diversity of false beginners in relation to their contexts such as their curricula of English language courses, and educational goals.

Keywords SLA, false beginners, cognitive load, remedial education, university reform

INTRODUCTION

Diversity in universities not only enhance productivity, creativity and innovation in academia and industries, but can also nurture humans who can work and cooperate with various people in various industries. With a trend towards global competition in the higher education sector in Japan, recent Japanese administrations have encouraged universities to gain excellent foreign researchers and students to achieve global competitiveness (Amano, 2014).

English education has become more and more vital in the Japanese university reform. The current administration hopes that Japanese students, as well as foreign students, will learn subjects in English in the near future. A few universities have already implemented English-only education, where students learn EAP (English for Academic Purposes) through a new language teaching methodology called CLIL (Content and Language Integrated Learning). However, we should not forget a different aspect of diversity: decreasing academic quality of the students. This negative aspect is said to have stemmed from the decreasing of Japan's young adult population, increases in the number of private universities and the Japan's current economic slump (Kariya, 2014). The population of eighteen-year-olds has dropped from 2,050,000 in 1991 to 1,210,000 in 2009, while the deregulation of higher education has made it easier to open new private universities and to change junior colleges into universities. With their job opportunities decreasing in a long recession, high school graduates have no other options than to enter college.

These factors all contributed to the rise in the enrolment rate at universities, which was below 40% in 1990, but is now over 55%. There is a difficulty for Japanese educators to gain a wider image of Japanese higher education now as there is a huge gap between top universities and bottom ones. English education is not an exception. At the latter universities, students' proficiency level of English is very low, e.g. they lack the basic knowledge of grammar and vocabulary. Many students even do not have junior high school level of English achievement. They are said to be less motivated than ever and their attitude towards studying English is quite passive. Furthermore, they tend to be interested in themselves only and their own surroundings. As a result, they are indifferent to people and countries overseas.

In Japan, students usually study English for at least six years before entering a university. As English activities were implemented in Japanese public elementary schools, some students have even longer experience in English education. However, many students fail to acquire a basic level of English. They suffer from so-called "English allergy," and try to avoid English. These students are considered "false beginners."[1] The number of them seems to be increasing at Japanese universities and many Japanese universities offer them "remedial education."

False beginners are often identified as having bad scores on various types of tests. Unfortunately, their true knowledge of English cannot be measured by standardized tests, such as TOEIC and TOEFL, because many of them just guess and mark answers without thinking, or just choose one specific answer like "B." As a result, their raw scores are not really reliable because their scores largely depend on luck. For false beginners, graded tests like *EIKEN* (English Proficiency Test)[2] can give more information about their proficiencies as each grade test has a clear goal[3] and false beginners' proficiency can be measured.

False beginners often fail to continue learning English simply because they cannot manage English tests and are discouraged from their test results. If teachers develop grammar quizzes with less cognitive load, false beginners might be more motivated to study English for sustainable learning. In this paper, the authors closely looked into false beginners' English proficiency, by focusing on students' cognitive loads in grammar quizzes[4] and tried to analyze their answers.

LITERATURE REVIEW

In traditional SLA (Second Language Acquisition) theories, false beginners have been researched in terms of the individual differences between good learners and bad learners. It is considered that the levels learners attained are affected by learner's belief, affective level, age, aptitude, learning style, motivation, and personality. An article attributes such individual differences to cognitive developments which include schematization, cognitive load, cognitive learning style, and perspective for the future (Robinson, 2013). Grammar learning is too complicated in Japan, and this makes communicative approach fail in Japanese classrooms (Kudo, 2013).

In the late 1980s, a cognitive scientist called John Sweller revealed in his study of problem solving that learning is inhibited if learners have too much cognitive load on their working memory (Sweller, 1988). Cognitive load on working memory is divided into three types: intrinsic, extraneous, and germane (Paas, Renkl, & Sweller, 2004). Intrinsic load is a fundamental element and cannot be lowered, while extraneous load can be decreased by instructional designs. When people describe a shape, for example, explaining a shape only by words is more difficult than showing a picture. In this case, the picture decreases extraneous load. Changing the level of extraneous load, the cognitive load for the task does not exceed the limit of working memory. The germane load is said to encourage and automate schematization, which occurs when knowledge of short-term memory is converted into long-term memory.

With this theoretical background in mind, the authors reviewed their grammar quizzes. Answering multiple-choice grammar quizzes, the authors' students answer questions on three different types of knowledge, which roughly correspond to the above-described cognitive loads: intrinsic, extraneous, and germane. The authors have assumptions about students' grammar understanding: language learners use basic grammatical knowledge questioned as intrinsic load in working memory; they use other factors such as vocabulary, conjugation of verbs, and adjectives as extraneous loads; and they also use a combination or schematized knowledge of those individual factors as germane load. Three different types of knowledge are considered to have complex processes of retrieval from long-term memory.

False-beginners are often said to be very weak in understanding grammar. Do false beginners not have the essential knowledge of grammar? Do they have certain knowledge of grammar, but it is some other element that confuses them? To investigate the answers to these questions, the authors created three types of quizzes.

METHODOLOGY

Participants

The authors are both involved in English education for university students with a basic level of English in the quite different teaching contexts. One author (Aiba) teaches at a private university, where a wide range of engineering education is provided. Under the university reform, her university has become more research oriented as compared to before. Also to promote a global environment, the university attempts to attract more foreign students. The faculties teaching technology classes expect their students to read research papers in English, and they request English teachers to train them to attain these skills, while English proficiency of freshman students has been declining every year.

Students in her department have to take 8 credits of English as requirements. To motivate the students and provide them with the appropriate level of English lessons, a placement test is conducted for freshman students at the beginning of every school year. Students are allocated according to their placement test scores to a class. There are four levels of general English classes in the morning: basic, beginning, intermediate, and advanced levels. The students can go up to the next level after the completion of the assigned class. Participants in this paper are the Technology Major (TM) students in her Basic English classes.

The other author (Izumi) teaches in a Service Management department at a private university, which focuses on specific education required for service industries, such as hotels, restaurants, tourism, etc. There are few liberal arts classes, like history or philosophy; instead students learn what can be more applicable to their career, so students are very much encouraged to have real life working experience. As English is a requirement, all Management Major (MM) freshman and sophomore students have to take English as a mandatory requirement. This might decrease learners' motivation. A placement test is not conducted, so students' English levels vary in each class.

Procedures

The authors designed Diagnosis Quiz (DQ) by selecting 30 *EIKEN* questions (15 questions from Grade 4, 14 questions from Grade 3, and 1 question from Grade Pre-2). The author (Aiba) gave this DQ to the students in her Basic English I class in the Spring semester, 2014. The test was conducted in the last lesson in July. In her class, most students were freshman students. Then the same DQ with 30 questions was also conducted for Izumi's students in July in Spring semester 2014. In his English I class, most of the students were also freshmen.

After the DQ was conducted for both TM and MM, the lowest scoring 10 questions were selected from each school, and compared with the grammatical items (Table 1). As eight items are common with both majors, and most TM students take Basic English II class in Fall semester, the lowest 10 items of DQ by TM are used to modify follow-up quizzes. The authors made two sets of 10 follow-up quizzes with the same grammar items as DQ in order to lower cognitive load of the grammar quiz. Follow-Up quiz 1 (FU1) features the questions which decrease cognitive load more than DQ, and Follow-Up 2 (FU2) has even lower cognitive load than FU1. The procedures to develop theses follow-up quizzes are described in the next section.

As for follow-up quizzes, the author (Aiba) conducted FU1 and FU2 to TM in her Basic English II class in Fall semester 2014. The quizzes were given to the students in two different days. Each quiz is answered within six minutes, and answer keys and explanations are not given until FU2 is conducted in order not to affect the results of FU2. The students who attend both Spring and Fall semesters and take three

quizzes (DQ, FU1 and FU2) under the same condition are selected and only their results of the quizzes are analyzed to make test results precise.[5]

As for the other author's (Izumi) university, the same students are not enrolled in spring Semester and Fall semester, so his sophomore students in English III take DS (10 items), FU1 (10 items), and FU2 (10 items) on the same day for 15 minutes in Fall semester.

FINDINGS

Diagnosis Quiz

41 TM freshman students and 55 MM freshman students take DQ with thirty questions in July, and the lowest scoring 10 questions are selected. Table 1 shows the lowest score 10 grammatical items and their score results (%).

Table 1 The Lowest Score Grammatical Items

TM (41 students)		MM (55 students)	
1. Pronoun	17.1	1. Pronoun	18.2
2. Indirect question	22.0	2. Adverbial clause	21.8
3. Infinitive (It ...to–)	24.4	3. Present Perfect	23.6
3. Tag question	24.4	3. Indirect question	23.6
3. Interrogative	24.4	5. Interrogative	25.5
6. Gerund (finish –ing)	26.8	5. Gerund (finish –ing)	25.5
7. Infinitive (too...to–)	39.0	7. Infinitive (too...to–)	27.3
7. Adverbial clause	39.0	8. Gerund (for –ing)	30.9
9. Passive voice	39.9	8. Infinitive (It...to–)	30.9
10. Present perfect	41.5	10. Infinitive (ask...to–)	32.7

As shown in Table 1, the 10 lowest score items are fairly comparable between TM and MM: pronoun, infinitive (It...to–; too...to–), interrogative, gerund (finish –ing), adverbial clause (if...; when...), present perfect (haven't begun). Scores were almost on the same level for six lowest score items, but the remaining four items show a gap of the results, approximately 10 points between two groups.

Developing Follow-up Quizzes

Following DQ results, the authors modified DQ questions with the lowest 10 items and made two follow-up quizzes to decrease students' cognitive load in their grammar quizzes. If easier vocabulary is used, extraneous load can be decreased. The authors briefly explain the procedures of modifying four questions. (1) The question about possessive pronoun "theirs." shows the lowest score for both TM and MM. The percentages of right responses are only 17.1% (TM) and 18.2% (MM). The question was as follows:

> [DQ] A: Is that red car Tony and Jane's?
>   B: No. (   ) is white.
>   1 Theirs   2 They   3 Their   4 Its

Looking again at the question, the authors focused on the possessive pronoun "theirs." The word is surely learned at junior high school, but it does not appear as frequently as "mine" or "yours," which means students seldom see "theirs" after they learned it. The authors assume that unfamiliarity of the word caused the low score and so the authors made FU1 asking third-person singular possessive pronoun "hers," and for FU2, the possessive form of personal pronoun "their."[6] The followings are the questions:

[FU1] A: Is this pink hat your sister's?
　　　 B: No. (　) is white.
　　　　　 1 She　2 Her　3 Hers　4 His
[FU2] I have two brothers. (　　) names are Tom and Bob.
　　　　　 1 They　2 Their　3 Them　4 Theirs

(2) The question concerning indirect question shows the second lowest score rate. The percentages of right responses are only 22.0% (TM) and 21.8% (MM). The followings are the questions:

[DQ] A: Do you know (　　) George was absent from school yesterday?
　　　 B: Yes, he had to go to the dentist.
　　　　　 1 where　2 who　3 why　4 which

The authors have an assumption that students have a difficulty not in understanding the rules of the indirect question itself, but in understanding interrogative "why." It is assumed that the many students cannot choose the right answer because the response does not include the word "because," as many false beginners remember the combination of a question with "why" and an answer with "because." To lower students' cognitive load, the authors select more familiar interrogative word "where" than "why." In FU2, the main clause is changed to an affirmative sentence. The followings are the questions:

[FU1] Do you know (　　) Sue is from?
　　　　　 1 where　2 who　3 why　4 which
[FU2] I know (　　) Mary didn't come to school yesterday.
　　　　　 1 where　2 who　3 why　4 which

As for FU1, the authors also assumed that the question "where are you from?" is familiar to the students and the use of "where" decreases cognitive load. The name of person "Sue" is used as a third-person singular subject, just as in the DQ. As for FU2, the main clause is affirmative, not interrogative as in DQ, and also "was absent from" in DQ was changed to more familiar expression "didn't come to school." Interrogative "why" is used again as in DQ, in order to compare the results of DQ and FU2.[7] In this case, "which" is not an appropriate answer as students know there is only one Mary.

(3) Two out of 10 lowest score items involves syntax infinitive. The question includes sentence structure "It...for...to–." It shows a comparatively low rate of right answers. The percentages of right responses are 24.4% (TM) and 30.9% (MM). The question is as follows:

[DQ] It's unusual for Jenny (　　) a skirt to work.
　　　　　 1 wear　2 wears　3 wore　4 to wear

In this question, the authors assume the adjective "unusual" and phrase "for Jenny" make the syntax difficult, and the verb "wear" with irregular conjugation may have increased the cognitive load. The modified questions are as follows:

[FU1] It is necessary for Mr. Smith (　　) a tie in the office.
　　　　　 1 wear　2 wears　3 wore　4 to wear
[FU2] It's important (　　) English.
　　　　　 1 study　2 studies　3 studied　4 to study

As for FU1, the adjective "unusual" is changed to the more familiar word "necessary" and the other part remained as DQ. As for FU2, not only the adjective is changed, but also phrase "for..." is deleted to make the sentence simpler. Also, the verb "wear" is changed to the verb "study" with regular conjugation.[8]

(4) There is another infinitive syntax question with a relatively low score in DQ. The question includes sentence structure "too...to–." The percentages of right responses are 39.0% (TM) and 27.3% (MM). The

question is as follows:

> [DQ] The tea is too hot (   ). Wait for a few minutes.
>   1 drink   2 drinks   3 drank   4 to drink

In DQ, the authors assume that the sentence including "for a few minutes" and verb "drink" with irregular conjugation may increase students' cognitive load. So the authors make a one-sentence question in FU1 and FU2. The questions are as follows:

> [FU1] This question is too difficult (   ).
>   1 answer   2 answers   3 answered   4 to answer
> [FU2] Dan was too busy (   ) tennis.
>   1 play   2 plays   3 played   4 to play

(5) As for the other six items out of 10, the authors' considerations in creating FU1 and FU2 are briefly summarized: Do students really understand the rules of grammatical items, or is there a problem in the knowledge of vocabulary, and whether or not other factors prevent students from selecting right answers.

Results of Follow-up Quizzes

As for TM, 30 students out of 41 are considered as subjects as they have to take three quizzes under the same condition. The percentile of 30 students' DQ results are counted and recalculated, then quiz results of DQ, FU1 and FU2 are compared. FU1 and FU2 are conducted on two different days, and each quiz is conducted within six minutes.

As for MM, students in the author's (Izumi) class change in each semester, so the results of DQ in July are not used. Three quizzes of DQ, FU1 and FU2, 30 questions in total (10 questions of DQ, 10 questions of FU1, 10 questions of FU2) are conducted for the new students on the same day in Fall semester 2014. 55 sophomore students in the Service Management department take this set of quizzes for 15 minutes. Table 2 shows the results of DQ, FU1, and FU2 for both TM and MM.

Table 2 Results of DQ, FU1, and FU2

| TM (30 students, %)				MM (55 students, %)			
Grammatical Item	DQ	FU1	FU2	Grammatical Item	DQ	FU1	FU2
1. Pronoun	16.7	33.3	66.7	1. Present perfect	16.4	25.5	49.1
1. Indirect question	16.7	80.0	73.3	1. Infinitive (too...to–)	16.4	27.3	38.2
3. Gerund	20.0	46.7	63.3	2. Pronoun	18.2	20.0	38.2
3. Infinitive (too...to–)	20.0	36.7	63.3	3. Infinitive (it...to–)	20.0	14.5	34.5
3. Infinitive (It...to–)	20.0	53.3	86.7	5. Adverbial clause	27.3	43.6	29.1
6. Interrogative	23.3	6.7	26.7	6. Interrogative	29.1	34.5	23.6
7. Adverbial clause	36.7	46.7	26.7	7. Gerund	32.7	45.5	41.8
8. Passive voice	43.3	60.0	53.3	8. Indirect question	34.5	54.5	40.0
8. Tag question	43.3	50.0	33.3	9. Passive voice	34.5	69.1	45.5
10. Present perfect	46.7	46.7	76.7	10. Tag question	43.6	38.2	18.2

Comparison of Two Majors

In Figure 1, TM and MM have a similar overall trend: In both majors, DQ scores increase gradually from 16.4% to 46.7%, and FU1 and FU2 scores are higher than DQ scores for more than half grammatical items in both majors. However, there is a distinctive difference. On the one hand, TM results show a rigorous improvement up to 63.3–86.7% for the five lowest scoring grammatical items with extremely low DQ scores, 16.7%–20.0%. On the other hand, MM results show a very limited improvement, up to 34.5–49.1% for five lowest scoring grammatical items. But MM's FU1 results show a modest but steady improvement

for seven out of 10 grammatical items, which are actually 5.4–34.6% higher than DQ for these items.

If grammatical items are examined, another similarity and difference (Figure 2) can be found. Two majors have common grammatical items which show similar score improvement and decline patterns: for example, "pronoun (theirs)" and "infinitive (too...to–)" are two questions with the lowest scores in DQ, and their percentile has improved by manipulating questions. However, some grammatical items show a clear contrast between two majors: as for "indirect question," for example, TM shows the largest improvement from the lowest 16.7% to 73.3%, while MM shows comparatively higher DQ score (34.5%) but a modest improvement to 54.5% in FU1, and 40.0% in FU2. As for "interrogative," TM shows the largest decline to 6.7% in FU1, while MM shows a modest improvement to 34.5% in FU1.
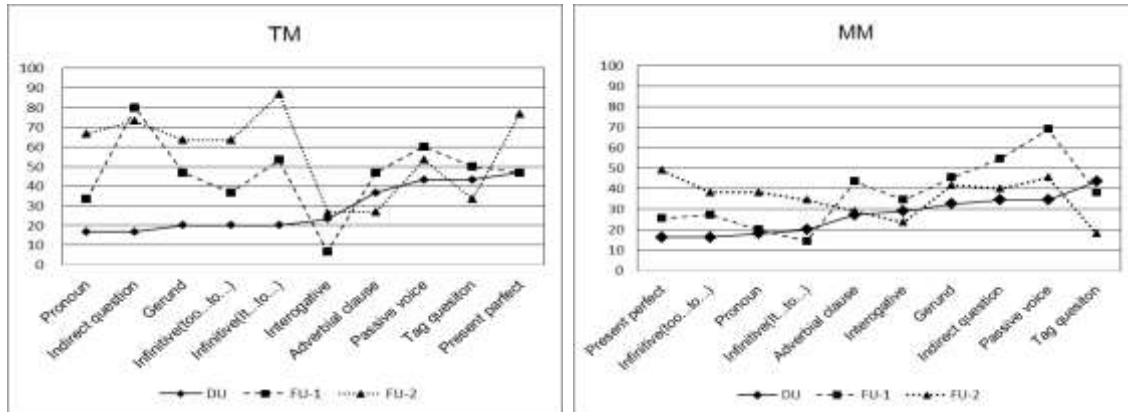
Figure 1 Comparison of Overall Test Results between TM and MM. Grammatical items are lined from bottom left to bottom right according to DQ scores (%) for each major. (The figures on the left are shown in percentile terms.)
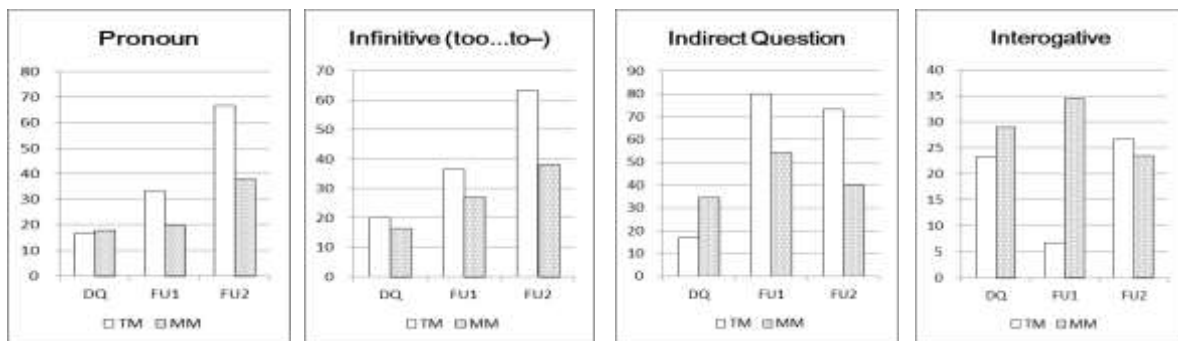
Figure 2 Comparison of Test Results of DQ, FU1 & FU2 for Four Grammatical Items between TM and MM. (The figures on the left are shown in percentile terms.)

DISCUSSION

False Beginners' Cognitive Load

The findings from the comparison between TM and MM imply the diversity amongst false beginners in terms of their capacity of cognitive load. Educators can improve grammar scores of some false beginner groups by modifying grammatical quizzes, or more specifically, by decreasing cognitive load in the grammar quizzes by eliminating the extraneous factors. The effects are larger in lower-scored items in TM than in MM. This implies that there might be more TMs who can handle quizzes if the quizzes are

appropriately modified or if the grammar quizzes are within their cognitive load. This means if intrinsic factors are more focused on and extraneous factors are less focused on, TM false beginners seem to select the right answers, while MM have some difficulties in grammar intrinsically and modifying extraneous factors do not affect them as much as TM.

It is also noticeable that for false beginners the scores of two grammar items "pronoun" and "infinitive" are improved if extraneous factors are eliminated or simplified, while some grammar items like "adverbial clause'' seem to be intrinsically difficult. Even with the manipulation of questions for these items, it is rather difficult to raise score results because these items require higher cognitive load than the false beginners' cognitive load. There is another difference between TM and MM. TM improved their score for "indirect question" as we expected, but their quiz result of "interrogative," especially, the percentile of FU1 dropped drastically. The authors assume that TM can arrange words based on grammatical rules comparatively better than MM students, but they find it difficult to understand the meaning of "interrogative." Interrogatives are often used in communication and acquired through conversation. TM often commented that they are not usually as sociable as MT. As grammatical knowledge and communication are doubtlessly intertwined, we assume that TM might have more difficulty in acquiring the interrogative than MM.

Relation to Motivation

As the authors have seen, the cognitive load of grammar quizzes can be lowered if teachers make a slight modification to quizzes, and it might prevent false beginners from becoming unmotivated. A motivational design study proposes to measure learners' motivation by multiplying importance and expectation (Keller, 2009). Based on this theory, the author's (Aiba) school has given a questionnaire to students to understand the learner's motivation. This system, called SIEM, has been conducted to advise teachers to enhance leaners' motivation at her department (Konno, Dohi, Miyakawa, & Inoue, 2009). Students can select the scale from one to five. Here are some samples in the questionnaire.

Motivation evaluation items		low high
<importance>	Do you think that it is important to learn English?	1 2 3 4 5
<expectation>	Do you want to improve your English ability?	1 2 3 4 5
SIEM assessment items		
<utility>	Do you think English learning will be a help in the future?	1 2 3 4 5
<autonomy>	Do you think you are studying English voluntarily?	1 2 3 4 5

This system allows us to understand which assessment item contributes to students' motivation statistically. The other author (Izumi) has selected some of the questions and conducted the questionnaire to his MM to compare the motivation level of TM and MM. The means of TM and MM are shown in Table 3 to compare the two groups of motivations.

Table 3 Comparison of Learner's Motivation between TM and MM

Participant	motivation items		assessment items	
	importance	expectation	utility	autonomy
TM (35 students)	4.51	4.28	4.42	2.54
MM (67 students)	4.24	4.08	4.5	3.46

The authors do not assume that the participant students represent the whole student body in each major. However, judging only from the above data, the two majors have the similar overall trends and the point that "utility" (which means the degree students consider English useful in the future) contributes largely to motivation. The rates for "autonomy" are lower than those for the other three items. As for "autonomy," TM show much lower rate than MM. This implies that TM study English because they think English is important and useful for their future, however, they do not want to study English voluntarily.

CONCLUSION

The key findings of this study can be summarized as follows: If you look at false beginners in terms of cognitive development, they are diverse in cognitive load, specifically in understanding and using grammatical knowledge. Such diversity can be seen not only on an individual level but on a group level. Understanding of grammatical items varies from group to group, depending on how much cognitive load each question requires.

These findings have pedagogical implications on learners' groups. First of all, there is not a single teaching methodology for all student groups. Communicative language learning (CLL) has been strongly recommended not only in ESL but also EFL environments including Japan. As this study shows, some groups of students cannot manage grammar-related cognitive load even in a communicative setting. A totally different approach, test preparation, will not work for false beginners either because many questions exceed their cognitive capacity. Although standardized tests have the advantage in assessing all types of students, preparation for such tests is not a solution for improving their English proficiency. It is still unclear whether or not it is effective to use standardized test scores as admission documents as MEXT[9] recommends.

The different traits of false beginners' cognitive ability may require different pedagogical approaches. One of the authors (Aiba) believes that grammar learning should be situated appropriately in students' learning context. In her opinion, "spiral learning" is appropriate for these students. TM false beginners go back and forth between grammatical learning with lower cognitive load and communicative learning; after they acquire the very basic grammar level, they go to the next level with a little higher cognitive load so that they can improve their English ability gradually. This back-and-forth methodology can be implemented in grammar learning and communication simultaneously, which might become closer to the well-known methodology called "Focus-on-Form" (Doughty & Long 2005). At the same time, communicative language teaching helps to decrease cognitive load by using 'chunking,' which employ a 'chunk' as a unit of utterance instead of individual vocabulary item (Tanaka, Sato, & Abe 2006). For TM false beginners, the author (Aiba) feels that if grammar is practiced in communication repeatedly, it would be more effective.

The other author (Izumi) believes that ESP (English for Specific Purpose) is better for the false beginners of MM because explicit teaching of grammar does not seem to be effective. Rather, in his opinion, those false-beginners should practice English phrases as a whole in a living context such as hotels, shops, restaurant, or any other sites especially in the service industry, so that they can acquire practical English. He also strongly believes that however difficult it is for MM to learn English, they need to learn it as an international language. Even if they do not work in a huge multinational enterprise with branch offices all over the world, they still have an opportunity to use English in their working places, especially in this "glocalized" world (Robertson, 1995), where globalization and localization proceed together.

English education reform, as mentioned in the introduction, lost sight of the problem of decreasing academic quality. How can Japanese universities solve problems with false beginners? Our proposed solutions are:

1) To identify students' English level by using a commonly recognized standard like CEFR (Common European Framework of Language).
2) On a university level, to implement English education suited for majors in the universities, such as ESP, ESAP (English for Specific Academic Purpose), by using methodology with an attention to learners' cognitive development.
3) In high school, to consolidate junior high-level English, if students have not attained that level.
4) To reconsider the entire curriculum from elementary school level.

English education at elementary schools plays an important role for false beginners as many of them lose interest in English at the beginning stage of junior high school. If students have some kind of successful or enjoyable experience at this early stage, they will not become allergic to English.

The gap between the top and bottom students has widened, each group has different sub-groups major by major, and individuals are different. Therefore, curricula from elementary school to university should be reconsidered to manage such diversity with a broad perspective.

NOTES

1 According to a Collins dictionary (web), "a false beginner" means "a language student who has some knowledge of a language, but who needs to start again from the beginning."
2 Japan's most widely used English-language proficiency testing program called "Jitsuyo Eigo Gino Kentei (Test in Practical English Proficiency)."
3 Grade 5 is almost equivalent to junior high beginning level, grade 4, junior high intermediate level, grade 3 is junior high graduate level, grade pre-2, high school intermediate level, grade 2, high school graduate level. There are two higher level tests, grade pre-1 and 1.
4 The authors use the word "quiz" instead of "test," because they do not intend to evaluate learners' performance, but to assess learners' understanding of English grammar, and the number of questions is very small.
5 Aiba (2014) shows only TM results. In the proceedings of the ISeLT2015, she works with the co-author to compare and contrast TM results with MM results.
6 Some graded vocabulary lists help us to understand what vocabulary students are supposed to learn. JACET 8000 vocabulary list (Aizawa, Ishikawa, & Murata, 2008), for example, tells us that "theirs" is on its level 5 (college, general), "hers" is on its level 3 (high school textbook equivalent), and "their" and "mine" are on level 1 (junior high, basic).
7 According to JACET 8000, "why," "where," "come" are on the level 1, while "absent" is on the level 4 (college, elementary).
8 According to JACET 8000, "unusual," "necessary," "important," "wear," and "study" are all on the level 1.
9 Ministry of Education, Culture, Sports, Science and Technology. The authorities govern Japanese education from primary to higher education.

REFERENCES

Aiba, C. (2014). A preliminary study on decreasing false beginners' cognitive load in English grammar quizzes. *Bulletin of Tokyo Denki University, Arts and Science, 12*, 235-239.
Aizawa, K., Ishikawa, S., & Murata, M. (Eds.). (2005). *JACET 8000 basic English vocabulary*. Tokyo: Kirihara shoten.
Amano, I. (2014). Globalization and higher education reforms in Japan: The obstacles to greater international competitiveness. Retrieved from http://www.nippon.com/en/in-depth/a02801/
Collins English Dictionary. Retrieved from http://www.collinsdictionary.com/dictionary/english/false-beginners
Doughty, C. J. & Long, M. (2005). *The handbook of second language acquisition*. Oxford: Blackwell.
Ellis, R. (1994). *The study of second language acquisition*. Oxford: Oxford University Press.
Kariya, T. (2014). Japanese university reforms and the illusion of international competitiveness. Retrieved from http://www.nippon.com/en/in-depth/a02803/
Keller, J. M. (2009). *Motivational design for learning and performance: The ARCS model approach*. NY: Springer US.
Konno, N., Dohi, S., Miyakawa O., & Inoue. Y. (2009). The introduction of SIEM, an education system to enhance learner motivation, to English language education: Development of the English-education version of the SIEM assessment. *Bulletin of Tokyo Denki University, Arts and Science, 7*, 37–44.
Kudo, M. (2013). Cognitive load theory (CLT) as a conceptual and practical means for improving English as a foreign language education in Japan. *Educational Studies 55*, 55–62.
Paas, F., Renkle, A., & Sweller, J. (2004). Cognitive load theory and instructional design: Recent developments. *Educational Psychologist, 38* (1), 1–4.
Robertson, R. (1995). Glocalization: Time-space and homogeneity-heterogeneity. In M. Featherstone., S. Lash, & R. Robertson. (Eds.), *Global Modernity's*. London: Sage.
Robinson, P. (Ed.). (2013). *The Routledge encyclopedia of second language acquisition*. New York, NY: Routledge.
Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science, 12*(2), 257–285.
Tanaka, S., Sato, Y., & Abe, H. (2006). *Practical instruction for acquiring sense of English language: Utilizing core and chunk*. Tokyo: Taishukan.